Oversight (OFHEO) as the GSEs' safety and soundness regulator and affirmed, clarified and expanded the Secretary of Housing and Urban Development's GSE regulatory authority. FHEFSSA also provided that, except for certain exclusive authorities of the Director of OFHEO, and all other matters relating to the GSEs' safety and soundness, the Secretary had general regulatory power over the GSEs. (See section 1321 of FHEFSSA, 12 U.S.C. 4541.)

Further, FHEFSSA detailed and expanded the Department's responsibilities to establish, monitor, and enforce housing goals for the GSEs' purchases of mortgages that finance housing for low- and moderate-income families (the "Low- and Moderate-Income Housing Goal"), housing located in central cities, rural areas, and other underserved areas (the "Underserved Areas Housing Goal"), and special affordable housing, affordable to very low-income families and low-income families in low-income areas (the "Special Affordable Housing Goal") (collectively, the "Housing Goals" or, individually, the "Housing Goal"). (See, generally, sections 1331-1334 of FHEFSSA, 12 U.S.C. 4561–4564.) There is also a subgoal under the Special Affordable Housing Goal for multifamily housing.

Under FHEFSSA, the Department is required to establish each Housing Goal after consideration of certain factors that are relevant to the particular Housing Goal, including: (a) National housing needs; (b) economic, housing and demographic conditions; (c) the performance and efforts of the GSEs toward achieving the Housing Goal in previous years; (d) the size of the market for mortgages targeted by the Housing Goal relative to the overall conventional mortgage market; (e) the ability of the GSEs to lead the industry in making credit available for mortgages targeted by the Housing Goal; and (f) the need to maintain the sound financial condition of the GSEs. (See sections 1332(b), 1333(a)(2), 1334(b) of FHEFSSA; 12 U.S.C. 4562(b); 12 U.S.C. 4563(a)(2); and 12 U.S.C. 4564.) (There are slight differences among the three Housing Goals in the statutory specification of the factors. In particular, for the Special Affordable Housing Goal factors (b) and (d) are absent, and there is a factor for data submitted in previous years to the Secretary in connection with the Housing Goal.)

For the transition period of 1993–1994, FHEFSSA required HUD to establish interim Housing Goals, which HUD did in 1993 (at 53 FR 53048). In November 1994, HUD extended the 1994 interim Housing Goals for both

GSEs through 1995 while the Department completed its development of post-transition Housing Goals (see 59 FR 61504).

In 1995, the Department issued a proposed rule (60 FR 9154, published February 16, 1995) and, several months later, a final rule (60 FR 61846, published December 1, 1995) (the 'Housing Goals 1995 final rule'') establishing the Housing Goals for the years 1996 through 1999, along with regulations implementing FHEFSSA. The Housing Goals 1995 final rule provided that the Housing Goals for 1999 would continue beyond 1999 if the Department elected not to change the Housing Goals, and that HUD could change the level of the Housing Goals for the years 2000 and beyond based upon HUD's experience and in accordance with HUD's statutory authority and responsibility.

The Housing Goals 1995 final rule established counting requirements to calculate performance under the Housing Goals. The Housing Goals 1995 final rule also: (1) Prohibited the GSEs from discriminating in any manner, on any prohibited basis, in their mortgage purchases; (2) implemented procedures for the exercise of HUD's new program review authority; (3) established reporting requirements and a public use data base of the GSEs' mortgage purchase activities; (4) provided protections for GSE confidential and proprietary information; and (5) established enforcement procedures.

On March 9, 2000, HUD published a proposed rule to establish new Housing Goal levels for Fannie Mae and Freddie Mac for calendar years 2000 through 2003 (see 65 FR 12632–12816). On October 31, 2000, after analyzing over 250 comments, HUD issued a final rule establishing the new Housing Goals (the "Housing Goals 2000 Final Rule," 65 FR 65044–65229).

The Housing Goals 2000 final rule increased the level of the Housing Goals for Fannie Mae and Freddie Mac. Specifically, this rule:

- (1) Increased the level of the Housing Goals for calendar years 2001 through 2003 as follows:
- The Low- and Moderate-Income Housing Goal increased to 50 percent;
- The Underserved Areas Housing Goal increased to 31 percent;
- The Special Affordable Housing Goal increased to 20 percent;
- The Special Affordable Multifamily Subgoal increased to the respective average of one percent of each GSE's total mortgage purchases during the period of 1997 Through 1999; and
- Pending establishment of annual Housing Goals for the year 2004 and

thereafter, the annual Housing Goals for each of those years were to be established at 50 percent, 31 percent, and 20 percent, respectively;

(2) Made temporary bonus points available for the GSEs' purchases of mortgages for small multifamily properties with 5 to 50 units, and, above a threshold, for single-family 2- to 4-unit owner-occupied rental properties, for calendar years 2001 through 2003 (but not for subsequent years, unless determined by HUD);

(3) Established a temporary adjustment factor ("TAF") for Freddie Mac's purchases of mortgages on large multifamily properties (over 50 units) for calendar years 2001 through 2003;

(4) Prohibited high-cost mortgage loans with predatory features from receiving Housing Goals credit;

- (5) Established and clarified counting rules under the Housing Goals for the treatment of missing affordability data, purchases of seasoned mortgage loans, purchases of federally insured mortgage loans and purchases of mortgage loans on properties with expiring assistance contracts;
- (6) Established procedures for HUD's review of transactions to determine appropriate Housing Goal treatment; and
- (7) Made certain definitional and technical corrections to the Housing Goals 1995 final rule.

The Housing Goals 2000 final rule provided for the award of temporary bonus points (double credit) toward the Housing Goals for both GSEs' mortgage purchases that financed single-family, owner-occupied 2-4 unit properties and 5–50 unit multifamily properties. Under the TAF, the rule also awarded Freddie Mac 1.2 units credit for each multifamily unit in property over 50 units.1 The Housing Goals 2000 final rule made clear, however, that both of these measures were temporary, intended to encourage the GSEs to ramp up their efforts to meet financing needs that had not been well served. During the three years for which the temporary bonus points and TAF were established, HUD expected the GSEs to develop new, sustainable business relationships and purchasing strategies for the targeted needs.

At the end of the three years (2001–2003), the Department determined not to extend the bonus points or the TAF, after careful review of the facts and circumstances of performance under the Housing Goals. Data indicate that both GSEs increased their financing of units

¹ Congress increased the level of the TAF to 1.35 per unit, section 1002 of Pub. L. 106–554 (December 21, 2000)

targeted by the bonus points and the TAF.

B. Background: Fannie Mae and Freddie Mac

Fannie Mae and Freddie Mac were chartered by the Congress as government sponsored enterprises. Pursuant to section 301 of the Federal National Mortgage Association Charter Act (the "Fannie Mae Charter Act", 12 U.S.C. 1716, et seq.) and section 301(b) of the Federal Home Loan Mortgage Corporation Act (the "Freddie Mac Charter Act", 12 U.S.C. 1451, et seq.), the GSEs were chartered expressly to:

(1) Provide stability in the secondary market for residential mortgages;

(2) Respond appropriately to the private capital market;

(3) Provide ongoing assistance to the secondary market for residential mortgages (including activities relating to mortgages on housing for low- and moderate-income families involving a reasonable economic return that may be less than the return earned on other activities) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing; and

(4) Promote access to mortgage credit throughout the nation (including central cities, rural areas, and other underserved areas) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing.

As a result of their status as GSEs, Fannie Mae and Freddie Mac receive significant explicit benefits that are not enjoyed by fully private shareholderowned corporations in the mortgage market. These benefits include:

- Conditional access to a \$2.25 billion line of credit from the U.S. Treasury (see section 306(c)(2) of the Freddie Mac Charter Act and section 304(c) of the Fannie Mae Charter Act);
- Exemption from the securities registration requirements of the Securities and Exchange Commission and the States (*see* section 306(g) of the Freddie Mac Charter Act and section 304(d) of the Fannie Mae Charter Act); ² and
- Exemption from all State and local taxes except property taxes (see section

303(e) of the Freddie Mac Charter Act and section 309(c)(2) of the Fannie Mae Charter Act).

Fannie Mae and Freddie Mac engage in two principal businesses: purchasing and otherwise investing in residential mortgages and guaranteeing securities backed by residential mortgages.

While the securities that the GSEs guarantee, and the debt instruments they issue, are explicitly not backed by the full faith and credit of the United States, and nothing in this proposed rule should be construed otherwise, such securities and instruments trade at yields only a few basis points over those of U.S. Treasury securities with comparable terms. Moreover, these securities also offer yields lower than those for securities issued by fully private firms that are more highly capitalized but otherwise comparable.

These factors, in addition to the fact that the market does not require that individual GSE securities be rated by a national rating agency, evidence that investors perceive that GSE-guaranteed securities have inherent advantages over other types of guaranteed securities in light of the GSEs' relationship to the Federal Government, including their public purposes, their Congressional charters, and the explicit benefits provided in their charters as described above.

Consequently, the GSEs are able to fund their operations at lower cost than other private firms with similar financial characteristics. In a recent report, the Congressional Budget Office (CBO) estimated this funding advantage for the year 2003 to be a \$19.6 billion annual combined subsidy for both GSEs. Of this amount, CBO estimated that the GSEs retained about \$6.2 billion, or approximately one-third of the subsidy, for their officers and shareholders, while the remainder accrued to borrowers.³

C. Secretary's Approach To Regulating the GSEs

In return for the public benefits they receive, Congress has mandated in the GSEs' Charter Acts that the GSEs carry out public purposes not required of other private sector entities in the housing finance industry.

Specifically, as indicated, the GSEs' Charter Acts require them to continually assist in the efficient functioning of the secondary market for residential mortgages, including mortgages for lowand moderate-income families that may involve a reasonable economic return that is less than the economic return on other mortgages. The GSEs also are required to promote access to mortgage credit throughout the nation, including central cities, rural areas, and other underserved areas. These statutory mandates obligate the GSEs to work to ensure that everyone in the nation has a reasonable opportunity to enjoy access to the mortgage financing benefits resulting from the activities of these enterprises.

The GSEs have achieved an important part of their mission: providing stability and liquidity to large segments of the housing finance markets. They have also increased their purchases of loans affordable to low-income families over the past decade since the affordable housing goals were put in place under FHEFSSA. Through partnership efforts, new product offerings, and flexible underwriting and purchase standards, both enterprises have reached out to underserved borrowers, as discussed below in this preamble and in the appendices.

The major premise of this proposed rule is that the GSEs must further utilize their entrepreneurial talents and power in the marketplace to genuinely "lead the mortgage finance industry" and to "ensure that citizens throughout the country enjoy access to the public benefits provided by these federally related entities." (See, S. Rep. No. 282, 102d Cong., 2d Sess. 34 (1992).)

For example, despite the record national homeownership rate of 67.9 percent in 2002, certain segments of the population clearly have not benefited to the same degree that others have from the advantages and efficiencies provided by Fannie Mae and Freddie Mac. Problems continue to persist for low-income families and certain minorities:

• Lower homeownership rates prevail for certain minorities, especially for African-American households (47.9 percent) and Hispanics (48.2 percent). These gaps are only partly explained by differences in income, age, and other socioeconomic factors. Disparities in mortgage lending are reflected in loan denial rates of minority groups when compared to white applicants. Denial rates for conventional home purchase mortgage loans (excluding manufactured housing loans) in 2002 were 19.9 percent for African Americans, 14.0 percent for Native

² Fannie Mae and Freddie Mac have both announced their intention voluntarily to register their common stock with the Securities and Exchange Commission (SEC) under section 12(g) of the Securities Exchange Act of 1934. Fannie Mae's registration became effective March 31, 2003. Freddie Mac has stated that it will complete the process of voluntarily registering its common stock once it resumes timely reporting of its financial results.

^{3 &}quot;Updated Estimates of the Subsidies to the Housing GSEs", attachment to a letter from Douglas Holtz-Eakin, Director, Congressional Budget Office, to the Honorable Richard C. Shelby, Chairman, Committee on Banking, Housing, and Urban Affairs, United States Senate, April 8, 2004. A related recent study is Wayne Passmore, "The GSE Implicit Subsidy and Value of Government Ambiguity," Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series, FEDS Working Paper 2003–64, December 2003.

American applicants, 15.1 percent for Hispanic applicants, 8.9 percent for Asian applicants, and 7.9 percent for

White applicants.

 While Fannie Mae and Freddie Mac cannot be expected to solve all these problems, they have both the resources and the expertise to improve credit access for low- and moderate-income families, minority families, and families in underserved areas. The GSEs also have the ability to increase the financing of affordable multifamily rental housing. Yet, studies by HUD and others show that the GSEs generally have been less active in historically underserved markets where there is a need for additional sources of financing to address persistent housing and credit needs, and fully private companies, operating without the benefits of GSE status, perform better in these markets.

 Between 1999 and 2002, special affordable housing borrowers accounted for 14.4 percent of Fannie Mae's acquisitions of home purchase mortgage loans and 14.5 percent of Freddie Mac's acquisitions, at the same time that such mortgages accounted for 16.4 percent of home purchase loans originated in the overall conventional, conforming market (excluding B&C loans) in

metropolitan areas.

 During the same period, mortgage purchases on properties located in underserved areas accounted for 24.0 percent and 22.9 percent of Fannie Mae's and Freddie Mac's acquisitions of home purchase loans, respectively, and 25.8 percent of home purchase mortgages originated in the primary market.

 Both Fannie Mae and Freddie Mac have lagged the market in funding firsttime homebuyers. Between 1999 and 2002, first-time homebuyers accounted for 27 percent of each GSE's purchases of home purchase loans, compared with 38 percent for home purchase loans originated in the conventional

conforming market.

Fannie Mae and Freddie Mac have increased their role in providing financing for the low-income end of the mortgage market, but the GSEs need to increase their efforts further and demonstrate their capacity to be industry leaders. There are ample market opportunities for them to do so,

- Continuing to introduce new products, and providing greater flexibility in their purchase and underwriting guidelines, to better address the unique circumstances of low-income families;
- Continuing to look for sound investment opportunities in those lower-income sectors that have not yet

received the benefits of mainstream lenders supported by an active secondary market;

- Expanding their penetration in the following market segments: (1) Borrowers with credit blemishes, or with little traditional credit history; (2) first-time homebuyers; (3) Community Reinvestment Act ("CRA")-related loans, which are loans to low- and moderate-income populations and neighborhoods in a financial institution's assessment area as established under the CRA; (4) the rental property market; and (5) the market for rehabilitation loans; and
- Increasing their outreach to, and achieving greater efficiency in, the above identified markets, as well as in other markets that serve low-income and moderate-income families and families living in underserved areas.

Under the present rulemaking, the Department is proposing new, higher levels for the Housing Goals, accompanied by subgoals under each of the Housing Goals for purchases of home purchase mortgages on owneroccupied properties in metropolitan areas. (The subgoals are hereafter referred to in this rule as "Home Purchase Subgoal" or "Subgoal".) The Department's purpose in proposing higher Housing Goals and in establishing new Home Purchase Subgoals in this rulemaking is to encourage the GSEs to facilitate greater financing and homeownership opportunities for families and neighborhoods targeted by the Housing Goals. In developing these regulations, the Department was guided by, and reaffirms, the following principles established in the Housing Goals 1995 final rule:

(1) The GSEs should fulfill FHEFSSA's intent that they lead the industry in ensuring that access to mortgage credit is made available for very low-, low- and moderate-income families and residents of underserved areas. HUD recognizes that, to lead the mortgage industry over time, the GSEs will have to stretch to reach certain Housing Goals and to close gaps between the secondary mortgage market and the primary mortgage market for various categories of loans. This approach is consistent with the Congress' directive that "the enterprises will need to stretch their efforts to achieve" the goals (see S. Rep. No. 282, 102d Cong., 2d Sess., 35 (1992)).

(2) The Department's role as a regulator is to set broad performance standards for the GSEs through the Housing Goals, but not to dictate the specific products or delivery mechanisms the GSEs will use to

achieve a Housing Goal. Regulating two exceedingly large financial enterprises in a dynamic market requires that HUD provide the GSEs with sufficient latitude to use their innovative capacities to determine how best to develop products to carry out their respective missions. HUD's regulations are intended to allow the GSEs the flexibility to respond quickly to market opportunities. At the same time, the Department must ensure that the GSEs' strategies address national credit needs, especially as they relate to housing for low- and moderate-income families and housing located in underserved geographical areas. The addition of Home Purchase Subgoals to the regulatory structure provides an additional means of encouraging the GSEs' affordable housing activities to address identified, persistent credit needs while leaving to the GSEs the specific approaches to meeting these needs.

(3) Discrimination in lending—albeit sometimes subtle and unintentionalhas denied racial and ethnic minorities the same access to credit to purchase a home that has been available to similarly situated non-minorities. As noted above, troublesome gaps in homeownership remain for minorities even after record growth in affordable lending and homeownership during the nineties. Studies indicate that, over the next few years, minorities will account for a growing share of the families seeking to buy their first home. HUD's analyses indicate, however, that Fannie Mae and Freddie Mac account for a relatively small share of the minority first-time homebuyer market. The GSEs have a responsibility to promote access to capital for minorities and others who are seeking their first homes, and to demonstrate the benefits of such lending to industry and borrowers alike. The GSEs also have an integral role in eliminating predatory mortgage lending practices.

(4) In addition to the GSEs' purchases of single-family home mortgages, the GSEs also must continue to assist in the creation of an active secondary market for mortgages on multifamily rental housing. Affordable rental housing is essential for those families who cannot afford to become, or who choose not to become, homeowners. For this reason, the GSEs must assist in making capital available to assure the continued development of single-family and multifamily rental housing.

With these principles in mind, the Department is proposing levels of the Housing Goals that will bring the GSEs to a position of market leadership in a range of foreseeable economic

circumstances related to the future course of interest rates and consequent fluctuations in origination rates on home purchase and refinance mortgages-both multifamily and single-family. For each Goal, HUD has projected Goal-qualifying percentages of mortgage originations in terms of ranges that cover a variety of economic scenarios. The objective of HUD's proposed Housing Goals is to bring the GSEs' performance to the upper end of HUD's market range estimate for each Goal, consistent with the statutory criterion that HUD should consider the GSEs' ability to lead the market for each Goal. To enable the GSEs to achieve this leadership, the Department is proposing modest increases in Housing Goal levels for 2005 which will increase further, year-by-year through 2008, to achieve the ultimate objective for the GSEs to lead the market under a range of foreseeable economic circumstances by 2008. Such a program of staged increases is consistent with the statutory requirement that HUD consider the past performance of the GSEs in setting the Goals. Staged annual increases in the Goals will provide the enterprises with opportunity to adjust their business models and prudently try out business strategies, so as to meet the required 2008 levels without compromising other business objectives and requirements.

The Department believes that the Home Purchase Subgoals that it proposes to establish under this rulemaking are necessary and warranted. Increasing homeownership is a national priority. As detailed below, the GSEs must apply greater efforts to increasing homeownership for low- and moderate-income families, families living in underserved areas, and verylow income families and low-income families living in low-income areas. The addition of Home Purchase Subgoals to the regulatory structure will serve to better focus the GSEs' efforts in a clear and transparent manner and better allow the government and public alike to monitor the GSEs' efforts in meeting the nation's homeownership needs.

Moreover, the Department reaffirms its view that neither the award of bonus points for particular mortgage purchases nor the temporary adjustment factor for Freddie Mac's multifamily purchases are necessary. At this point, their continued use would only result in misleading information about the extent to which the GSEs are, in fact, meeting the Housing Goals. The decision to increase the levels of the Housing Goals substantially in a staged manner under this proposal and, at the same time, not to renew the bonus points or TAF, will ensure that the GSEs continue to

address the areas formerly targeted by these measures. The business relationships that the GSEs established when these provisions were in place will be necessary to meet the higher Housing Goals.

The Department's proposals to increase the levels of the Housing Goals, and to establish new Home Purchase Subgoals, are predicated upon its recognition that the GSEs not only have the ability to achieve these Housing Goals but, also, that they are fully consistent with the statutory factors established under FHEFSSA. In addition, these proposals are supported by the Department's comprehensive analyses of the size of the mortgage market, the opportunities available to the GSEs, America's unmet housing needs, and identified credit gaps.

The Department anticipates that, as the GSEs' businesses grow, the increased level of the Housing Goals, and the new Home Purchase Subgoals, will enable the GSEs to continue to address new markets and persistent, unmet housing finance needs.

II. Implementation

- A. Affordable Housing Goals
- 1. Proposed Changes to Housing Goal Levels

The current Housing Goal levels are 50 percent for the Low- and Moderate-Income Housing Goal, 31 percent for the Underserved Areas Housing Goal, and 20 percent for the Special Affordable Housing Goal. The Special Affordable Housing Goal includes a Subgoal for mortgage purchases financing dwelling units in multifamily housing which is 1.0 percent of the average annual dollar volume of mortgages (both single-family and multifamily) purchased by the respective GSE in 1997, 1998, and 1999—\$2.85 billion annually for Fannie Mae and \$2.11 billion annually for Freddie Mac.

The Department is proposing in this rulemaking to increase the Housing Goal levels as follows:

- The proposed level of the Low- and Moderate-Income Housing Goal is 52 percent in 2005, 53 percent in 2006, 55 percent in 2007, and 57 percent in 2008;
- The proposed level of the Underserved Areas Housing Goal is 38 percent in 2005, 39 percent in 2006, 39 percent in 2007, and 40 percent in 2008; and
- The proposed level of the Special Affordable Housing Goal is 22 percent in 2005, 24 percent in 2006, 26 percent in 2007, and 28 percent in 2008.
- In addition, HUD is proposing to retain the Special Affordable Multifamily Subgoal for calendar years

2005–2008, at 1.0 percent of their respective average dollar volumes of mortgage purchases in calendar years 2000, 2001, and 2002. This would increase the dollar value to \$5.49 billion annually for Fannie Mae and \$3.92 billion annually for Freddie Mac.

The Housing Goal percentages that are proposed in this rule reflect the application of area median incomes and minority percentages based on 2000 Census data, the Census Bureau's specification of census tract boundaries for the 2000 Census, and the Office of Management and Budget's specification of metropolitan area boundaries based on the 2000 Census.

2. HUD's Consideration of Statutory Factors in Setting the Housing Goals

As discussed above, HUD considered six statutory factors before it decided upon the levels of the Housing Goals being proposed in this rulemaking, as described in Section III(B) of this preamble and proposed rule amendment numbers 3–5 of this proposed rule. A summary of HUD's findings relative to each factor follows. More detailed discussion of these points is included in Appendices A, B, and C.

- a. Demographic, Economic, and Housing Conditions
- (i) Demographic Trends. Changing population demographics will result in a need for the primary and secondary mortgage markets to meet nontraditional credit needs, respond to diverse housing preferences and overcome information and other barriers that many immigrants and minorities face.

The U.S. Census Bureau has projected that the U.S. population will grow by an average of 2.5 million persons per year between 2000 and 2025, resulting in about 1.2 million new households per year. The aging of the baby-boom generation and the entry of the baby-bust generation into prime home-buying age will have a dampening effect on housing demand. Growing housing demand from minorities, immigrants and non-traditional homebuyers will help offset declines in the demand for housing caused by the aging of the population

population.

The continued influx of immigrants will increase the demand for rental housing, while those who immigrated during the 1980s and 1990s will be in the market for homeownership.

Immigrants and minorities—who accounted for nearly 40 percent of the growth in the nation's homeownership rate over the past five years—will be responsible for almost two-thirds of the growth in the number of new households over the next ten years.

Non-traditional households have become more important, as overall household formation rates have slowed. With later marriages, divorce, and nontraditional living arrangements, the fastest growing household groups have been single-parent and single-person households. By 2025, non-family households will make up a third of all households. The role of traditional 25to-34 year-old married, first-time homebuyers in the housing market will be smaller in the current decade due to the aging of the population. Between 2000 and 2025, the Census Bureau projects that the largest growth in households will occur among householders 65 and over.

As these demographic factors play out, the overall effect on housing demand will likely be continued growth and an increasingly diverse household population from which to draw new renters and homeowners. A greater diversity in the housing market will, in turn, require greater adaptation by the primary and secondary mortgage markets.

(ii) Economic and Housing *Conditions.* While most other sectors of the economy were weak or declining during 2001 and 2002, the housing sector showed remarkable strength. The housing market continued at a record

pace during 2003.

In 2002, the U.S. economy moved into recovery, with real Gross Domestic Product (GDP) growing 2.2 percent, although measures of unemployment continued to rise. In October 2002, the average 30-year home mortgage interest rate slipped below 6 percent for the first time since the mid-1960s. Favorable financing conditions and solid increases in house prices were the key supports to record housing markets during both 2002 and 2003. By the end of 2003, the industry had set new records in singlefamily permits, new home sales, existing home sales, interest rates, and homeownership. Other indicators—total permits, starts, completions, and affordability—reached levels that were among the highest in the past two decades.

Over the near term, the Administration's forecast for real GDP growth is 4.0 percent for 2004, while the Congressional Budget Office (CBO) projects that real GDP will grow at an average rate of 3.2 percent from 2005 through 2008. The ten-year Treasury rate is projected to average 5.5 percent between 2005 and 2008 compared to its average of 4.6 percent in 2002 and 4.0 percent in 2003. Standard & Poor's expects housing starts to average 1.8 million units in 2004-05. Fannie Mae projects existing home sales at 6.1

million units for 2004 and 5.8 million for 2005, compared to their record 6 million level in 2003

(iii) Mortgage Market Conditions. Low interest rates and record levels of refinancing caused mortgage originations to soar from \$2.2 trillion in 2001 to \$2.9 trillion in 2002 and around \$3.8 trillion in 2003. Fannie Mae projects that mortgage originations will drop to \$2.4 trillion in 2004 and \$1.7 trillion in 2005, as refinancing returns to more normal levels. The volume of home purchase mortgages was \$910 billion to \$1.1 trillion between 1999 and 2001 before jumping to \$1.2 trillion in 2002 and \$1.3 trillion in 2003. As with housing starts, the home purchase origination market is expected to exhibit sustained growth.

b. National Housing Needs

(i) Affordability Problems. Data from the 2000 Census and the American Housing Surveys demonstrate that there are substantial housing needs among low- and moderate-income families. Many of these households are burdened by high homeownership costs or rent payments and, consequently, are facing serious housing affordability problems.

There is evidence of persistent housing problems for Americans with the lowest incomes. HUD's analysis of American Housing Survey data reveals that, in 2001, 5.1 million households had "worst case" housing needs, defined as housing costs greater than 50 percent of household income or severely inadequate housing among unassisted very-low-income renter households. Among these households, 90 percent had a severe rent burden, 6 percent lived in severely inadequate housing, and 4 percent suffered from both problems. Among the 34 million renters in all income categories, 6.3 million (19 percent) had a severe rent burden and over one million renters (3 percent) lived in housing that was severely inadequate.

(ii) Disparities in Housing and Mortgage Markets. Despite the strong growth in affordable lending over the past ten years, there are families who are not being adequately served by the nation's housing and mortgage markets.

Serious racial and income disparities remain. The homeownership rate for minorities is 25 percentage points below that for whites. A major HUD-funded study of discrimination in the sales and rental markets found that while discrimination against minorities was generally down since 1989, it remained at unacceptable levels in 2000. The most prevalent form of discrimination against Hispanic and African-American home seekers observed in the study was

Hispanics and African Americans being told that housing units were unavailable when non-Hispanic whites found them to be available. The study also found other worrisome trends of discrimination in metropolitan housing markets that persisted in 2000, for example, geographical steering experienced by African-American homebuyers, and real estate agents who provided less assistance in obtaining financing for Hispanic homebuyers than for non-Hispanic whites.4 Racial disparities in mortgage lending are also well documented. HUD-sponsored studies of the pre-qualification process conclude that African Americans and Hispanics face a significant risk of unequal treatment when they visit mainstream mortgage lenders. Studies have shown that mortgage denial rates are substantially higher for African Americans and Hispanics, even after controlling for applicant income and a host of underwriting characteristics, such as the credit record of the applicant.5

The existence of substantial neighborhood disparities in homeownership and mortgage credit is also well documented for metropolitan areas. HUD's analysis of HMDA data shows that mortgage credit flows in metropolitan areas are substantially lower in high-minority and low-income neighborhoods and mortgage denial rates are much higher for residents of these neighborhoods. Studies have also documented that mainstream lenders often do not operate in inner-city minority neighborhoods, leaving their residents with only high-cost lenders as options. Too often, residents of these same neighborhoods have been subjected to the abusive practices of

predatory lenders.

These troublesome disparities mostly affect those families (minorities and immigrants) who are projected to account for almost two-thirds of the growth in the number of new households over the next ten years.

(iii) Single-Family Market: Trends in Affordable Lending and Homeownership. Many younger, minority and lower-income families did not become homeowners during the 1980s due to the slow growth of earnings, high real interest rates, and continued house price increases. Over the past ten years, economic expansion, accompanied by low interest rates and

 $^{^4}$ Margery Austin Turner, All Other Things Being Equal: A Paired Testing Study of Mortgage Lending Institutions, The Urban Institute Press, April 2002. Appendix A includes further discussion of this study.

 $^{^{5}\,\}mbox{These}$ studies are discussed in section B.1 of Appendix B.

increased outreach on the part of the mortgage industry, has improved affordability conditions for these families.

As this preamble and the appendices note, there has been a "revolution in affordable lending" that has extended homeownership opportunities to historically underserved households. The mortgage industry, including the GSEs, has offered more customized mortgage products, more flexible underwriting, and expanded outreach to low-income and minority borrowers.

HMDA data suggest that the industry and GSE initiatives are increasing the flow of credit to underserved borrowers. Between 1993 and 2002, conventional loans to low-income and minority families increased at much faster rates than loans to upper-income and nonminority families. Conventional home purchase originations to African-Americans more than doubled between 1993 and 2002 and those to Hispanic borrowers more than tripled during this period. Home loans to low-income borrowers and to low-income and highminority census tracts also more than doubled during this period.

Thus, the 1990s and the early part of the current decade have seen the development of a strong affordable lending market. Homeownership statistics show similar trends. After declining during the 1980s, the homeownership rate has increased every year since 1994, reaching a record mark of 67.9 percent in 2002. The number of households owning their own home in 2002 was 10.6 million greater than in 1994. Gains in homeownership rates have been widespread over the last eight years, with the homeownership rate for African American households increasing from 42.5 percent to 47.9 percent, for Hispanic households from 41.2 percent to 48.2 percent, for non-Hispanic white households from 50.8 percent to 55.1 percent, and for central city residents from 48.5 percent to 51.8 percent from 1994 to 2002.

Despite the record gains in homeownership since 1994, a substantial gap in the homeownership rate of approximately 25 percentage points prevails for African-American and Hispanic households as compared to white non-Hispanic households. Studies show that these lower homeownership rates are only partly accounted for by differences in income, age, and other socioeconomic factors.

In addition to low income, barriers to homeownership that disproportionately affect minorities and immigrants include: lack of capital for down payment and closing costs; poor credit history; lack of access to mainstream lenders; little understanding of the home buying process; a limited supply of modestly priced homes; and continued discrimination in housing markets and mortgage lending. These barriers are discussed in Appendix A.

(iv) Single-Family Market: Potential Homeowners. As already noted, the potential homeowner population over the next decade will be highly diverse, as growing housing demand from immigrants (both those who are already in this country and those who are projected to arrive), minorities, and nontraditional homebuyers will help to offset declines in the demand for housing caused by the aging of the population.

Fannie Mae reports that, between 1980 and 1995, the number of new immigrant owners increased by 1.4 million and, between 1995 and 2010, that figure is expected to rise by more than 50 percent to 2.2 million. These trends do not depend on the future inflow of new immigrants, as immigrants do not, on average, enter the home purchase market until they have been in this country for eleven years. Fannie Mae staff note that there are enough immigrants already in this country to keep housing demand strong for several years.

Thus, the need for the GSEs and other industry participants to meet nontraditional credit needs, respond to diverse housing preferences, and to overcome the information barriers that many immigrants face will take on added importance. A new or recent immigrant may have no credit history or, at least, may not have a credit history that can be documented by traditional methods. In order to address these needs, the GSEs and the mortgage industry have been developing innovative products and seeking to extend their outreach efforts to attract these homebuyers, as discussed in Appendix A.

In addition, the current low homeownership rates in inner cities (as compared with the suburbs) also suggest that urban areas may be a potential growth market for lenders. As explained in Appendix A, lenders are beginning to recognize that urban borrowers and properties have different needs than suburban borrowers and properties. CRA-type lending will continue to be important in our inner cities.

Surveys indicate that these demographic trends will be reinforced by the fact that most Americans desire, and plan, to become homeowners. According to Fannie Mae's 2002 National Housing Survey, Americans rate homeownership as the best investment they can make, far ahead of 401(k)s, other retirement accounts, and stocks. Forty-two percent of African-American families reported that they were "very or fairly likely" to buy a home in the next three years, up from 38 percent in 1998 and 25 percent in 1997. Among Hispanics and Hispanic immigrants, the numbers reached 37 percent and 34 percent, respectively. The survey also reported that more than half of Hispanic renters cite homeownership as being "one of their top priorities."

In spite of these trends, potential minority and immigrant homebuyers see more obstacles to buying a home than does the general public. Typically, the primary barriers to homeownership are credit issues and a lack of funds for a downpayment and closing costs. However, other barriers also exist, such as a lack of affordable housing, little understanding of the home buying process, and language barriers. Thus, the new group of potential homeowners will have unique needs.

The GSEs can play an important role in tapping this potential homeowner population. Along with others in the industry, they can address these needs on several fronts, such as expanding education and outreach efforts. introducing new products, and adjusting current underwriting standards to better reflect the special circumstances of these new households. These efforts will be necessary if the Administration's goal of expanding minority homeownership by 5.5 million families by the end of the decade is to be achieved. (In this regard, the Joint Center for Housing Studies has stated that, if favorable economic and housing market trends continue, and if additional efforts to target mortgage lending to low-income and minority households are made, the homeownership rate could reach 70 percent by 2010.)

The single-family mortgage market has been very dynamic over the past few years, experiencing volatile swings in originations (with the 1998 and 2001-2003 refinancing waves), witnessing the rapid growth in new types of lending (such as subprime lending) incorporating new technologies (such as automated underwriting systems), and facing serious challenges (such as abusive predatory lending). Fannie Mae and Freddie Mac have played a major role in the ongoing changes in the single-family market and in helping the industry address the problems and challenges that have arisen.

The appendices to this proposed rule discuss the various roles that Fannie Mae and Freddie Mac have played in the single-family market. A wide range of topics is examined, including the GSEs' automated underwriting technology used throughout the industry, their many affordable lending partnerships and underwriting initiatives aimed at extending credit to underserved borrowers, their development of new targeted lowdownpayment products, their entry into new markets such as subprime lending, and their attempts to reduce predatory lending. As that discussion emphasizes, the GSEs have the ability to bring increased efficiencies to a market and to attract mainstream lenders into markets. (Readers are referred to Appendices A-C for further discussion of the GSEs role in different segments of the singlefamily mortgage market.)

(v) Multifamily Mortgage Market. The market for financing of multifamily apartments has reached record volume. The favorable long-term prospects for apartments, combined with record low interest rates, have kept investor demand for apartments strong and have also supported property prices.

Fannie Mae and Freddie Mac have been among those boosting their volumes of multifamily financing and both have introduced new programs to serve the multifamily market. Fannie Mae and, especially (considering its early withdrawal from the market), Freddie Mac have rapidly expanded their presence in the multifamily mortgage market under the Housing Goals.

Freddie Mac has successfully rebuilt its multifamily acquisition program, as shown by the increase in its purchases of multifamily mortgages: from \$27 million in 1992 to \$3 billion in 1997 and then to approximately \$7 billion annually during the next three years (1998 to 2000), before rising further to \$11.9 billion in 2001 and \$13.3 billion in 2002. Multifamily units accounted for 8.4 percent of all dwelling units (both owner and rental) financed by Freddie Mac between 1999 and 2002.

Concerns regarding multifamily capabilities no longer constrain Freddie Mac's performance with regard to the Housing Goals. Although Fannie Mae never withdrew from the multifamily market, it has stepped up its activities in this area substantially, with multifamily purchases rising from \$3.0 billion in 1992 to \$9.4 billion in 1999, and \$18.7 billion in 2001, and then declining slightly to \$18.3 billion in 2002. Multifamily units accounted for 9.2 percent of all dwelling units (both owner and rental) financed by Fannie Mae between 1999 and 2002.

The increased role of Fannie Mae and Freddie Mac in the multifamily market

has major implications for the Low- and Moderate-Income Housing and Special Affordable Housing Goals, since high percentages of multifamily units have affordable-level rents and can count toward one or both of these Housing Goals. However, the potential of the GSEs to lead the multifamily mortgage industry has not been fully developed. The GSEs' purchases between 1999 and 2002 accounted for only 30 percent of the multifamily units that received financing during this period. Certainly there are ample opportunities and room for expansion of the GSEs' share of the multifamily mortgage market.

The GSEs' size and market position between loan originators and mortgage investors make them the logical institutions to identify and promote needed innovations and to establish standards that will improve market efficiency. As their role in the multifamily market continues to grow, the GSEs will have the knowledge and market presence to push simultaneously for standardization and for programmatic flexibility to meet special needs and circumstances, with the ultimate goal of increasing the availability and reducing the cost of financing for affordable and other multifamily rental properties.

The long-term outlook for the multifamily rental market is sustained, moderate growth, based on favorable demographics. The minority population, especially Hispanics, provides a growing source of demand for affordable rental housing. "Lifestyle renters" (older, middle-income households) are also a fast-growing segment of the rental population.

At the same time, the provision of affordable housing units will continue to challenge suppliers of multifamily rental housing as well as policy makers at all levels of government. Low incomes, combined with high housing costs, define the difficult situation of millions of renter households. Housing cost reductions are constrained by high land prices and construction costs in many markets. Regulatory barriers at the state and local level have an enormous impact on the development of affordable rental housing. Government actionthrough land use regulation, building codes, and occupancy standards—is a major contributor to high housing costs.

Since the early 1990s, the multifamily mortgage market has become more closely interconnected with global capital markets, although not to the same degree as the single-family mortgage market. Loans on multifamily properties are still viewed as riskier by some than mortgages on single-family properties. Property values, vacancy

rates, and market rents of multifamily properties appear to be highly correlated with local job market conditions, creating greater sensitivity in loan performance to economic conditions than may be experienced for single-family mortgages.

There is a need for an ongoing GSE presence in the multifamily secondary market, both to increase liquidity and to further affordable housing efforts. The potential for an increased GSE presence is enhanced by the fact that an increasing proportion of multifamily mortgages are now originated in accordance with secondary market standards. Small multifamily properties, and multifamily properties with significant rehabilitation needs, have historically experienced difficulty gaining access to mortgage financing, and the flow of capital into multifamily housing for seniors has been historically characterized by volatility. The GSEs can play a role in promoting liquidity for multifamily mortgages and increasing the availability of long-term, fixed rate financing for these properties.

c. GSEs' Past Performance and Effort Toward Achieving the Housing Goals

Both Fannie Mae and Freddie Mac have improved their affordable housing loan performance over the past ten years, since the enactment of FHEFSSA and HUD's establishment in 1993 of the Housing Goals. However, the GSEs' mortgage purchases have generally lagged, and not led, the overall primary market in providing financing for affordable housing to low- and moderate-income families and underserved borrowers and their neighborhoods, indicating that there is more that the GSEs can do to improve their performance.

- (i) Performance on the Housing Goals. The year 2001 was the first year under the higher levels of the Housing Goals established in the Housing Goals 2000 final rule. Both GSEs met all three Housing Goals in 2001 and 2002. Their performance is discussed further in a later section of this preamble.
- (ii) The GSEs' Efforts in the Home Purchase Mortgage Market. The Appendices include a comprehensive analysis of each GSE's performance in funding home purchase mortgages for borrowers and neighborhoods targeted by the three Housing Goals—special affordable and low- and moderate-income borrowers and underserved areas. The GSEs' role in the first-time homebuyer market is also analyzed. Because homeownership opportunities are integrally tied to the ready availability of affordable home purchase

loans, the main findings from that analysis are provided below:

 Both Fannie Mae and Freddie Mac have increased their purchases of affordable loans since the Housing Goals were put into effect, as indicated by the increasing share of their business going to the three Goals-qualifying categories. Between 1992 and 2002, the special affordable share of Fannie Mae's purchases of home purchase loans in metropolitan areas more than doubled, rising from 6.3 percent to 16.3 percent, while the underserved areas share increased more modestly, from 18.3 percent to 26.7 percent. The figures for Freddie Mac are similar. The special affordable share of Freddie Mac's business rose from 6.5 percent to 15.8 percent, while the underserved areas share increased more modestly, from 18.6 percent to 25.8 percent.

 While both GSEs improved their performance, they have lagged the primary market in providing affordable loans to low-income borrowers and underserved neighborhoods. Freddie Mac's average performance, in particular, fell far short of market performance during the 1990s. Fannie Mae's performance was better than Freddie Mac's during 1993-2002, as well as during 1996-2002, which covers the period under HUD's currently defined Housing Goals. For the 1996-2002 period, 21.7 percent of Freddie Mac's purchases financed properties in underserved neighborhoods, compared with 23.5 percent of Fannie Mae's purchases, 24.9 percent of loans originated by depository institutions (i.e., banks and savings associations), and 25.4 percent of loans originated in the conventional conforming market (i.e., loans below the conforming loan limit that are not government insured or guaranteed).

 During the more recent 1999-to-2002 period, both Fannie Mae and Freddie Mac fell significantly below the market in funding special affordable loans. During that period, special affordable loans accounted for 14.4 percent of Fannie Mae's purchases, 14.5 percent of Freddie Mac's purchases, and 16.4 percent of loans originated in the market. Thus, the "Fannie Mae-to-market" ratio was 0.88 (14.4/16.4), as was the "Freddie Mac-to-market" ratio. Between 1999 and 2002, underserved area loans accounted for 24.0 percent of Fannie Mae's purchases, 22.9 percent of Freddie Mac's purchases, and 25.8 percent of loans originated in the market, resulting in a "Fannie Mae-tomarket" ratio of 0.93 and a "Freddie Mac-to-market" ratio of 0.89.

• Both GSEs, but particularly Fannie Mae, markedly improved their

performance during 2001 and 2002, the first two years under HUD's higher Housing Goal targets. Evaluating their activity relative to the market depends, to some extent, on the way in which GSE activity is measured. Under the purchase-year approach for measuring GSE activity (in which characteristics of mortgages purchased by a GSE in a particular year, including mortgages originated in prior years, are compared with characteristics of mortgages originated just within the year), Fannie Mae's average performance during 2001 and 2002 matched the market in the low- and moderate-income category and approached the market in the special affordable and underserved areas categories. For example, during 2001 and 2002, loans for special affordable borrowers accounted for 15.6 percent of Fannie Mae's purchases, compared with 16.0 percent of market originations. As explained in Appendix A, conclusions about Fannie Mae's recent performance relative to the market depend significantly on whether GSE activity is measured on a "purchase year" basis or on an "origination year" basis (in which characteristics of mortgages originated in a particular year are compared with characteristics of mortgages that were originated in that year and purchased by a GSE in that year or a subsequent year). Fannie Mae matched the market in the low- and moderate-income category in 2002, using the more consistent "origination year" approach. (See Appendix A for further discussion.)

• While Freddie Mac has consistently improved its performance relative to the market, it continued to lag the market in all three Housing Goal categories during 2001 and 2002. For example, during 2001 and 2002, loans financing properties in underserved areas accounted for 24.1 percent of Freddie Mac's purchases, compared with 25.9 percent of market originations.

• Appendix A to this rule compares the GSEs' funding of first-time homebuyers with that of primary lenders in the conventional conforming market. Both Fannie Mae and Freddie Mac lag the market in funding first-time homebuyers, and by a rather wide margin. Between 1999 and 2002, first-time homebuyers accounted for 27 percent of each GSE's purchases of home loans, compared with 38 percent for home loans originated in the conventional conforming market.

• The GSEs account for a small share of the market for important groups such as minority first-time homebuyers. Considering all mortgage originations (both government and conventional) between 1999 and 2001, it is estimated that the GSEs purchased only 14 percent

of all loans originated for African-American and Hispanic first-time homebuyers, or one-third of their share (42 percent) of all home purchase loans originated during that period. Considering conventional conforming originations during the same time period, it is estimated that the GSEs purchased only 31 percent of loans for African-American and Hispanic firsttime homebuyers, or about one-half of their share (57 percent) of all home purchase loans in that market. A large percentage of the lower-income loans purchased by the GSEs had relatively low loan-to-value ratios and consequently high down payments, which may explain the GSEs' limited role in the first-time homebuyer market.

d. Size of the Mortgage Market That Qualifies for the Housing Goals

The Department estimates the size of the conventional, conforming market for loans that would qualify under each Housing Goal category. The market estimates (which reflect 2000 Census data and geography) are as follows:

• 51–57 percent for the Low- and Moderate-Income Housing Goal

• 24–28 percent for the Special Affordable Housing Goal

• 35–40 percent for the Underserved Areas Housing Goal (based on 2000

Census geography).

These market estimates exclude the B&C (subprime loans that are not A minus grade) portion of the subprime market. The estimates, expressed as ranges, allow for economic and market affordability conditions that are more adverse than recent conditions. The market estimates are based on several mortgage market databases such as Home Mortgage Disclosure Act (HMDA) and American Housing Survey data. The Department's estimates of the size of the conventional mortgage market for each Housing Goal are discussed in detail in Appendix D.

The GSEs have substantial room for growth in serving the affordable housing mortgage market. The Department estimates that the two GSEs' mortgage purchases accounted for 49 percent of the total (single-family and multifamily) conventional, conforming mortgage market between 1999 and 2002. In contrast, GSE purchases comprised 42 percent of the low- and moderateincome market, 41 percent of the underserved areas market, and a still smaller 35 percent of the special affordable market. Thus, 58-65 percent of the Goals-qualifying markets have not yet been touched by the GSEs.

The GSEs' presence in mortgage markets for rental properties, where much of the nation's affordable housing is concentrated, is below that in the single-family-owner market. The GSEs' share of the rental market (including both single-family and multifamily) was only 30 percent during the 1999-to-2002

period. Obviously, there is room for the GSEs to increase their presence in the single-family rental and multifamily rental markets.

Table 1 summarizes the Department's findings regarding GSE performance

relative to HUD's market estimates for 1999–2002, market projections for 2005–2008, and the proposed Housing Goal levels for 2005–2008.

BILLING CODE 4210-27-P

Table 1

Market Estimates, Baseline Performance and HUD's Proposed Housing Goals

	HUD's Projected	Market Estimate		51-57%	35-40%	24-28%
HUD's Estimated	1999-2002	Market Average1		57%	39%	28%
GSEs' Average Baseline Performance	1999-2002 (Fannie	Mae/ Freddie Mac)		49% 47%	35% 33%	20%
		als	2008	57%	40%	28%
		Housing Go	2007	55%	39%	26%
		2005-2008 Proposed Housing Goals	2006	53%	39%	24%
		2005-2	2005	52%	38%	22%
	2001-2004	Housing Goals		20%	31%	20%
				Low- and Moderate-Income	Underserved Areas	Special Affordable

See Appendix D for reasons why the 1999-2002 average market estimate for special affordable loans is at the top end of the market range projected for the

years 2005-2008.
Equivalent to 36% based on 2000 census tract geography, Metropolitan Statistical Areas as specified in 2003, and 2000 census data on area median income and minority concentrations.

The analysis reflected in Table 1 is based on 2000 Census data on area median incomes and minority concentrations, with the metropolitan area boundaries specified in June 2003 by the Office of Management and Budget. This affects the market percentages for all three Housing Goals, as well as the figures on area median incomes and minority percentage figures that will be used to measure GSE performance on the Housing Goals beginning in 2005. For example, expressing the Underserved Areas Housing Goal in terms of 2000 Census data adds approximately 5 percentage points to the Housing Goal and market levels, compared with analysis using 1990 Census data with Metropolitan Statistical Areas as defined prior to

The GSEs' baseline performance figures in Table 1 exclude the effects of the bonus points for small multifamily and single-family 2–4 unit owner-occupied properties and the Temporary Adjustment Factor for Freddie Mac which were applied in official scoring toward the Housing Goals in 2001–2003. The Department did not extend these adjustments beyond 2003.

Table 1 reveals several features of HUD's proposed Housing Goals. First,

the high end of the range for HUD's 2005–2008 market projections is the same as or within one percentage point of the 1999–2002 average of the market levels for the Housing Goals.

Second, it is evident from this table that the proposed initial new level for the Special Affordable Housing Goal (22 percent) is below the low end of HUD's projected market range for 2005–2008 (24 percent). The proposed initial level of the Low- and Moderate-Income Housing Goal (52 percent) is at the lowend of HUD's market estimate range.

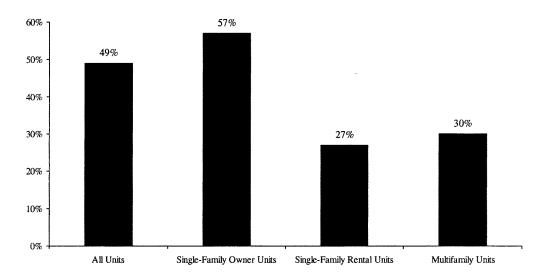
Third, the proposed initial Underserved Areas Housing goal level is more consistent than the current Goal level with the market range now projected by HUD for the Housing Goals using 2000 Census data.

Fourth, the GSEs' performance on all of the Housing Goals was significantly below the market average for 1999–2002. The higher Housing Goals are intended to move the GSEs closer to or within the market range for 2005 and to the upper end of the market range projection by 2008.

An analysis of the GSEs' mortgage purchases by property type shows that they have had much less presence in the "Goals-rich" rental segments of the market, as compared with the "less-

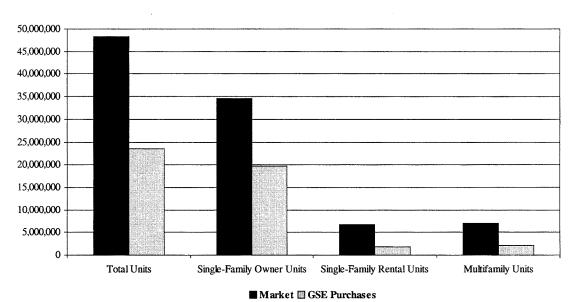
Goals-rich" owner segment of the market. As shown in Figure 1, GSE mortgage purchases represented only 27 percent of single-family rental units financed between 1999 and 2002, and only 30 percent of multifamily units financed during that time period—both figures are much lower than their 57 percent market share for single-family owner-occupied properties. (Figure 2 provides unit-level detail comparing the GSEs' purchases with originations in the conventional conforming market.) Typically, about 90 percent of rental units in single-family rental and multifamily properties qualify for the Low- and Moderate-Income Housing Goal, compared with about 44 percent of owner units. Corresponding figures for the Special Affordable Housing Goal are approximately 60 percent of rental units and 16.4 percent of owner units. Thus, one reason that the GSEs performance under the Low- and Moderate-Income Housing and Special Affordable Housing Goals has fallen short of HUD's market estimates is that the GSEs have had a relatively small presence in the two rental market segments, notwithstanding that these market segments are important sources of affordable housing and important components in HUD's market estimates.

Figure 1
GSEs' Share of the Conventional Conforming Market
by Property Type, 1999-2002



Source: See Table A.30. Appendix A.

Figure 2
Units in the Conventional Conforming Mortgage
Market Compared to GSE Purchases
by Property Type, 1999-2002



Source: See Table A.30, Appendix A.

In the overall conventional conforming mortgage market, rental units in single-family properties and in multifamily properties are expected to represent approximately 30 percent of the overall mortgage market, 45 percent of the units that collateralize mortgages qualifying for the Low- and Moderate-Income Housing Goal, and 60 percent of the units that collateralize mortgages qualifying for the Special Affordable Housing Goal. Yet between 1999 and 2002, units in such properties accounted for only 17 percent of the GSEs' overall purchases, 31 percent of the GSEs' purchases meeting the Lowand Moderate-Income Housing Goal, and 44 percent of the GSEs' purchases meeting the Special Affordable Housing Goal.⁶ The continuing weakness in GSE purchases of mortgages on single-family rental and multifamily properties is a significant factor explaining the shortfall between GSE performance and that of the primary mortgage market.

e. Ability of the GSEs To Lead the Industry

An important factor in determining the overall Housing Goal level is the ability of the GSEs to lead the industry in making mortgage credit available for Housing Goals-qualifying populations and areas.

The legislative history of FHEFSSA reflects Congress's strong concern that the GSEs need to do more to benefit low- and moderate-income families and residents of underserved areas that lack access to credit. (*See, e.g.,* S. Rep. 102–282 at 34.) The Senate Report on FHEFSSA emphasized that the GSEs should "lead the mortgage finance industry in making mortgage credit available for low- and moderate-income families." (*See* S. Rep. 102–282 at 34.)

families." (See S. Rep. 102–282 at 34.)
Thus, FHEFSSA specifically requires that HUD consider the ability of the GSEs to lead the industry in establishing the level of the Housing Goals.
FHEFSSA also clarified the GSEs' responsibility to complement the requirements of the CRA (see section 1335(a)(3)(B) of FHEFSSA, 12 U.S.C. 4565(a)(3)(B)), and fair lending laws (see section 1325 of FHEFSSA, 12 U.S.C. 4545) in order to expand access to capital to those historically underserved by the housing finance market.

While leadership may be exhibited through the GSEs' introduction of innovative products, technology, and processes, and through their establishment of partnerships and alliances with local communities and

community groups, leadership must always involve increasing the availability of financing for homeownership and affordable rental housing. Thus, the GSEs' obligation to "lead the industry" entails leadership in facilitating access to affordable credit in the primary market for borrowers at different income levels, and with different housing needs, as well as in underserved urban and rural areas.

Because the GSEs' market presence varies significantly by property type, the Department examined whether the GSEs have led the industry in three different market sectors served by the GSEs: single-family-owner, single-family rental (those with at least one rental unit and no more than four units in total), and multifamily rental.

The GSEs' purchases between 1999 and 2002 financed almost 60 percent of the approximately 35 million owneroccupied units financed in the conventional conforming market during that period. The GSEs' state-of-the-art technology, staff resources, share of the total conventional conforming market, and financial strength strongly suggest that they have the ability to lead the industry in making home purchase credit available for low-income families and underserved neighborhoods. From the analysis in Appendices A-D, it is clear that the GSEs are able to improve their performance and lead the primary market in financing Housing Goalsqualifying home purchase mortgages.

As discussed in Appendix A, there are a wide variety of quantitative and qualitative indicators that demonstrate that the GSEs have ample, indeed robust, financial strength to improve their affordable lending performance. For example, the combined net income of the GSEs has risen steadily over the last 15 years, from \$677 million in 1987 to \$10.4 billion in 2002. This financial strength provides the GSEs with the resources to lead the industry in making mortgage financing available for families and neighborhoods targeted by the Housing Goals.

The GSEs have been much less active in providing financing for the multifamily rental housing market. Between 1999 and 2002, the GSEs financed 2.2 million multifamily dwelling units, which represented approximately 30 percent of the 7.0 million multifamily dwelling units that were financed in the conventional market during this period. Thus, the GSEs' share of the multifamily mortgage market was just slightly over one-half of their share of the market for mortgages on single-family owner-occupied properties.

Similarly, HUD estimates that Fannie Mae and Freddie Mac accounted for only 27 percent of single-family rental units financed between 1999 and 2002. In this case, the GSEs' presence in the single-family rental mortgage market was less than one-half their presence in the market for mortgages on single-family owner-occupied properties.

Clearly there is room for the GSEs to increase their presence in the single-family rental and multifamily rental markets. As explained above, these markets are an important source of low-and moderate-income housing since these units qualify for the Housing Goals in a greater proportion than do single-family owner-occupied properties. Thus, Fannie Mae and Freddie Mac can improve their performance on each of the three Housing Goals if they increase their purchases of mortgages on rental properties.

As discussed in Section B below with respect to the Home Purchase Subgoals, the GSEs should be able to lead the market for single-family owneroccupied properties. The GSEs are already dominant players in this market which, unlike the rental markets, is their main business activity. However, as already discussed, research studies conducted by HUD and academic researchers conclude that the GSEs have not been leading this market, but have historically lagged behind the primary market in financing owner-occupied housing for low-income families, firsttime homebuyers, and housing in underserved areas.

f. Need To Maintain the Sound Financial Condition of the GSEs

Based on HUD's economic analysis and review by the Office of Federal Housing Enterprise Oversight, the Department has concluded that the proposed levels of the Housing Goals will not adversely affect the sound financial condition of the GSEs. Further discussion of this issue is found in the economic analysis that accompanies this rule.

3. Other Factors Considered by HUD in Proposing the New Housing Goals

HUD considered a number of additional factors in connection with its proposal to establish the new Housing Goals described in this rule. These additional factors also were relevant to HUD's proposal to establish the new Home Purchase Subgoals. The Department describes these additional factors in Section B of this preamble (see, "Home Purchase Subgoals" immediately below).

⁶ These percentage shares are computed from Table A.30 in Appendix A. Note that B&C loans are excluded from these data.

B. Home Purchase Subgoals

Given the need for, and the Administration's emphasis on, increasing homeownership opportunities, including those for lowand moderate-income and minority borrowers, HUD is proposing also to set Subgoals for GSE mortgage purchase activities to increase financing opportunities for low- and moderate-income, underserved, and special affordable borrowers who are purchasing single-family homes.

Specifically, the Department is proposing Subgoals for home purchase loans that qualify for the Housing Goals. The purpose of the Home Purchase Subgoals is to assure that the GSEs focus on financing home purchases for the homeowners targeted by the Housing Goals. The Department believes that the establishment of Home Purchase Subgoals will place the GSEs in an important leadership position in the Housing Goals categories, while also facilitating homeownership. The GSEs have years of experience in providing secondary market financing for singlefamily properties and are fully capable of exerting such leadership.

The focus of these Subgoals on home purchase loans meeting the Housing Goals will also help address the racial and income disparities in homeownership that exist today. Although minority homeownership has grown, the homeownership rate for African Americans and Hispanic families is still approximately 25 percentage points below that for non-Hispanic white families. The focus of the Subgoals on home purchase will also increase the GSEs' support of first-time homebuyers, a market segment where they have lagged primary lenders.

The Department's analysis suggests that the GSEs have not been leading the market in purchasing single-family, owner-occupied loans that qualify for

the Housing Goals. Although Fannie Mae's average performance during 2001 and 2002 matched the market in the low- and moderate-income category, and approached the market in the special affordable and underserved areas categories, the Department's analysis shows that there is ample room for both Fannie Mae and Freddie Mac to improve their performance in purchasing home loans that qualify for these Housing Goals, particularly in important market segments such as the minority, first-time homebuyer market.

As detailed in Appendix Å, evidence suggests that there is a significant population of potential homebuyers who are likely to respond well to increased homeownership opportunities produced by increased GSE purchases in this area. Immigrants and minorities, in particular, are expected to be a major source of future homebuyers. Furthermore, studies indicate the existence of a large untapped pool of potential homeowners among the rental population. Indeed, the GSEs' recent experience with new outreach and affordable housing initiatives confirms the existence of this potential.

Thus, the Department is proposing to establish Subgoals for home purchase loans that qualify for the three Housing Goals to encourage the GSEs to take a leadership position in creating homeownership financing opportunities within the categories that Congress expressly targeted with the Housing Goals.

1. Proposed Home Purchase Subgoals

Under this proposed rule, performance on the Home Purchase Subgoals would be calculated as Housing Goal-qualifying percentages of the GSEs' total purchases of mortgages that finance purchases of single-family, owner-occupied properties located in metropolitan areas, based on the owner's income and the location of the

property. Specifically, for each GSE the following proposed Subgoals would apply. (A "home purchase mortgage" is defined as a residential mortgage for the purchase of an owner-occupied single-family property.)

- 45 percent of home purchase mortgages purchased by the GSE in metropolitan areas must qualify under the Low- and Moderate-Income Housing Goal in 2005, with this share rising to 46 percent in 2006 and 47 percent in both 2007 and 2008;
- 33 percent of home purchase mortgages purchased by the GSE in metropolitan areas must qualify under the Underserved Areas Housing Goal in 2005, with this share rising to 34 percent in 2006 and 35 percent in both 2007 and 2008; and
- 17 percent of home purchase mortgages purchased by the GSE in metropolitan areas must qualify under the Special Affordable Housing Goal in 2005, with this share rising to 18 percent in 2006 and 19 percent in both 2007 and 2008.

Counting toward the Subgoals will be in terms of numbers of mortgages, not numbers of units. This is consistent with the basis of reporting in HMDA data, which were HUD's point of reference in establishing the Subgoal levels. HMDA data are reported in terms of numbers of mortgages.

These proposed Subgoals are shown in Table 2, along with information on what the GSEs' performance on the Subgoals would have been if they had been in effect for 1999–2002 (under the proposed scoring rules for 2005–08). Table 2 also presents HUD's estimates of the average shares of mortgages on owner-occupied single-family properties in metropolitan areas that were originated in 1999–2002 that would have qualified for these Subgoals.

Table 2

Shares of GSEs' Acquisitions of Home Purchase Mortgages Qualifying for the Subgoals, 1999-2002, and Proposed Subgoals for 2005-08

	Subgoal-Qualifyin	Qualifying N	ng Mortgage Purchases*	urchases*		Proposed Subgoals	Subgoals				Market**		:
Subgoal Catetory	6661	2000	2001	2002	2005	2006	2007	2008	1999	2000	2001	2002	Average
Low- and Moderate-Income Fannie Mae Freddie Mac Market	39.2% 40.0%	40.1%	41.7%	43.6%	45%	46%	47%	47%	44.0%	43.7%	41.6%	43.1%	43.1%
<u>Underserved Areas</u> Fannie Mae Freddie Mac Market	25.7% 26.1%	29.1% 27.4%	29.8% 27.4%	32.3%	33%	34%	35%	35%	30.2%	32.0%	30.7%	32.1%	31.2%
<u>Special Affordable</u> Fannie Mac Freddie Mac Market	12.5% 12.8%	13.4%	14.7%	15.8%	17%	18%	%61	19%	17.1%	17.0%	15.4%	15.7%	16.3%

* Based on proposed counting rules for 2005-08. Projected subgoals would apply to metropolitan areas only. See text for definition of subgoal-qualifying mortgages.

^{**} Conventional conforming market for home purchase mortgages in metropolitan areas (excluding the B&C portion of the subprime market.)

2. HUD's Determinations Regarding the Home Purchase Subgoal Levels

Current law does not require that HUD consider the statutory factors set forth in FHEFSSA prior to establishing or setting the level of Subgoals. FHEFSSA authorizes HUD to establish Subgoals within the Low- and Moderate-Income Housing Goal and the Underserved Areas Housing Goal. However, under current law, Subgoals under these two Goals are not enforceable. Also, FHEFFSA authorizes HUD to establish Subgoals within the Special Affordable Housing Goal and these Subgoals are enforceable. The Administration has proposed, as part of GSE regulatory reform, that Congress authorize HUD to establish a separate Home Purchase Goal that would include enforceable components. Pending the enactment of any such legislation, HUD is proposing the Subgoals described in this proposed rule under its current statutory authority.

The following sections provide an overview of HUD's reasons for establishing the Subgoals, which are detailed in the Appendices.

(a) The GSEs Have the Ability to Lead the Market. The GSEs have the ability to lead the primary market for mortgages on single-family owner-occupied properties, which are the "bread-andbutter" of their business. Both GSEs have long experience in the home purchase mortgage market, and therefore there is no issue of the degree to which they have penetrated the market, as there is with the singlefamily rental and multifamily mortgage markets. In addition, because the Subgoals focus on homeownership opportunities and, thus, do not include refinance loans, there is no issue regarding potentially large year-to-year changes in refinance mortgage volumes, which affect the magnitude of the denominator in calculating performance percentages under the Housing Goals, as experienced in the heavy refinance years of 1998 and 2001-2003.

Both GSEs have not only been operating in the single-family owner mortgage market for years, they have been the dominant players in that market, funding 57 percent of mortgages on single-family owner-occupied residences financed between 1999 and 2002. As discussed in Section G of Appendix A, their underwriting guidelines are industry standards and their automated mortgage systems are widely used in the mortgage industry.

Through their new low-downpayment products and various underwriting initiatives, and through their various partnership and outreach efforts, the GSEs have shown that they have the capacity to operate in underserved neighborhoods and to reach out to lower-income families seeking to buy a home. Both Fannie Mae and Freddie Mac have the staff expertise and financial resources to make the extra effort to lead the primary market in funding single-family-owner mortgages for low- and moderate-income, special affordable, and underserved area mortgages.

(b) The GSEs Have Lagged the Market. Even though the GSEs have the ability to lead the market, they have not done so under the Housing Goals. As noted earlier, the Department and independent researchers have published numerous studies examining whether or not the GSEs have been leading the single-family market in terms of funding loans that qualify for the three Housing Goals. While the GSEs have significantly improved their performance, they have lagged the primary market in funding Housing Goals-qualifying loans since FHEFSSA was enacted in 1992.

As also noted above, the type of improvement needed to meet the new Subgoals was demonstrated by Fannie Mae during 2001 and 2002, when its average performance matched the primary market in funding low- and moderate-income families and approached the market in funding special affordable families and properties in underserved areas.

(c) Disparities in Homeownership and Credit Access Remain. There remain troublesome disparities in our housing and mortgage markets, even after the "revolution in affordable lending" and the growth in homeownership that has taken place since the mid-1990s. The homeownership rate for African-American and Hispanic households remains 25 percentage points below that of white households. In 2002, the mortgage denial rate for African-American borrowers was over twice that for white borrowers, even after controlling for the income of the borrower

There is growing evidence that inner city neighborhoods are not always being adequately served by mainstream lenders. Some have concluded that a dual mortgage market has developed in our nation, with conventional mainstream lenders serving mainly white families living in the suburbs and FHA and subprime lenders serving minority families concentrated in inner city neighborhoods. In addition to the unavailability of mainstream lenders, families living in high-minority neighborhoods generally face many additional hurdles, such as lack of cash

for a downpayment, credit problems, and discrimination.

Immigrants and minorities are projected to account for almost two-thirds of the growth in the number of new households over the next ten years. As emphasized throughout this preamble and the Appendices, changing population demographics will result in a need for the primary and secondary mortgage markets to meet nontraditional credit needs, respond to diverse housing preferences and overcome information and other barriers that many immigrants and minorities face. The GSEs must increase their efforts towards providing financing for these families.

(d) There Are Ample Opportunities for the GSEs to Improve Their Performance in the Home Purchase Market. Home purchase loans that qualify for the Housing Goals are available for the GSEs to purchase, which means they can improve their performance and lead the primary market in purchasing loans for lower-income borrowers and properties in underserved areas. Three indicators of this have already been discussed.

First, the affordable lending market has shown an underlying strength over the past few years that is unlikely to vanish (without a significant increase in interest rates or a decline in the economy). Since 1999, the shares of the home purchase market accounted for by the three Housing Goal categories are as follows: 16.4 percent for special affordable, 32.3 for underserved areas, and 44.2 percent for low- and moderate-income.

Second, market share data reported in Section G of Appendix A show that over half of newly-originated loans that qualify for the Housing Goals are not purchased by the GSEs. As noted above, the situation is even more extreme for special sub-markets, such as the minority first-time homebuyer market where the GSEs have only a minimal presence. In terms of the overall mortgage market (both conventional and government), the GSEs funded only 24 percent of all first-time homebuyers and 17 percent of minority first-time homebuyers between 1999 and 2001. Similarly, during the same period, the GSEs funded only 40 percent of firsttime homebuyers in the conventional conforming market, and only 33 percent of minority first-time homebuyers in that market.

Finally, the GSEs' purchases that can count toward the Subgoal are not limited to new mortgages that are originated in the current calendar year. The GSEs can purchase loans from the substantial, existing stock of affordable loans held in lenders' portfolios, after

these loans have seasoned and the GSEs have had the opportunity to observe their payment performance. In fact, based on Fannie Mae's recent experience, the purchase of seasoned loans appears to be one useful strategy for purchasing Housing Goals-qualifying loans.

The current low homeownership rate of minorities and others living in inner cities suggests that there will be considerable growth in the origination of CRA loans in urban areas. For banks and thrifts, selling their CRA originations will free up capital to make new CRA loans. As a result, the CRA market segment provides an opportunity for the GSEs to expand their affordable lending programs. As explained in Appendix A, Fannie Mae and Freddie Mac have already started developing programs to purchase CRA-type loans on a flow basis as well as after they have seasoned.

While the GSEs can choose any strategy for leading the market, this leadership role can likely be accomplished by building on the many initiatives and programs that the enterprises have already started, including: (1) Their outreach to underserved markets and their partnership efforts that encourage mainstream lenders to move into these markets; (2) their incorporation of greater flexibility into their purchase and underwriting guidelines, (3) their development of new products for borrowers with little cash for a downpayment and for borrowers with credit blemishes or non-traditional credit histories; (4) their targeting of important markets where they have had only a limited presence in the past, such as the markets for minority first-time homebuyers; (5) their purchases of both newly-originated and seasoned CRA loans; and (6) their use of automated underwriting technology to qualify creditworthy borrowers that would have been deemed not creditworthy under traditional underwriting rules.

The experience of Fannie Mae and Freddie Mac in the subprime market indicates that they have the expertise and experience to develop technologies and new products that allow them to enter new markets in a prudent manner. Given the innovativeness of Fannie Mae and Freddie Mac, other strategies will be available as well. In fact, a wide variety of quantitative and qualitative indicators suggest that the GSEs have the expertise, resources and financial strength to improve their affordable lending performance enough to lead the home purchase market for special affordable, low- and moderate-income, and underserved areas loans. The recent improvement in the affordable lending performance of the GSEs, and particularly Fannie Mae, further demonstrates the GSEs' capacity to lead the home purchase market.

3. Counting of Mortgages for the Home Purchase Subgoals

The Department is proposing to amend § 81.15 to add a new paragraph (i) that would clarify that the procedures in §81.15 generally govern the counting of home purchase mortgages toward the Home Purchase Subgoals in §§ 81.12, 81.13 and 81.14. The new paragraph provides, however, that the numerator and denominator for purposes of counting performance under the Subgoals are comprised of numbers of home purchase *mortgages* in metropolitan areas, rather than numbers of dwelling units. Paragraph (i) also provides that, for purposes of addressing missing data or information for each Subgoal, the procedures in § 81.15(d) shall be implemented using numbers of home purchase mortgages in metropolitan areas and not single-family owner-occupied dwelling units. Finally, the new paragraph provides that where a single home purchase mortgage finances the purchase of two or more owner-occupied units, the mortgage shall count once toward each Subgoal that applies to the GSE's mortgage purchase.

C. Definition of Underserved Area for Rural Areas

The rule proposes to change the definition of "Underserved Area" for purposes of determining whether a 'Rural Area'' is an ''Underserved Area.' The definition of a "Rural Area" that is an "Underserved Area" would be a census tract, Federal or State American Indian Reservation or tribal or individual trust land, or the balance of a census tract excluding the area within any Federal or State American Indian reservation or tribal or individual trust land, having: (i) A median income at or below 120 percent of the greater of the State non-metropolitan median income or nationwide non-metropolitan median income and a minority population of 30 percent or greater, or (ii) a median income at or below 95 percent of the greater of the State non-metropolitan median income or nationwide nonmetropolitan income.

This is essentially the same definition that was established in HUD's Housing Goals 2000 final rule, except that census tracts, rather than counties, are the basic spatial unit for determining whether an area is underserved. Because HUD's proposed amendment would establish uniform standards for determining

whether a rural area qualifies as an underserved area, there is no longer any need to distinguish underserved areas located in New England from underserved areas in other areas of the country. For this reason, the Department is proposing to eliminate from the definition of "Underserved area" the current distinct regulatory treatment for New England.

D. Adequacy of Borrower Income Data

Accurate measurement of the GSEs' performance under the three Housing Goals depends on the completeness of data on borrower income (or, in the case of non-owner-occupied units, the rent) and property location. As between these two, property location is reported by the GSEs on most of the mortgages they purchase—a less than one percent incidence of missing or incomplete geographical data between 2000 and 2002 for each GSE. The incidence of missing borrower income data has been greater—on the order of several percentage points each year.

One reason for the increase in missing income data is the recent increased use of mortgages for which the borrower is not required to provide income information. For some of these mortgages the borrower presents information on assets but not income because of circumstances that make assets easier to document. Other mortgages are originated entirely on the basis of a credit report, property appraisal, and cash for the downpayment. These mortgages typically require relatively large downpayments and often require a higher interest rate than fully documented mortgages

The Housing Goals 2000 Final Rule provided that the GSEs may exclude from the denominator owner-occupied units lacking mortgagor income data which are located in low-or moderate-income census tracts, *i.e.*, tracts whose median income is no greater than the median income of the metropolitan area or, for properties located outside of metropolitan areas, the larger of the median incomes of the county or the statewide non-metropolitan area (*see* 24 CFR 81.15(d)).⁷

In view of the increasing use of loans made without obtaining income information from the borrower, there is a question whether HUD's existing counting rules for missing-data

 $^{^7}$ For rental units, the 2000 Housing Goals Final Rule also established counting rules which allow the GSEs to estimate rents or exclude units from the denominator when rent data are missing. See 24 CFR 81.15(e)(6)(i) on the rules applicable to multifamily units and 24 CFR 81.15(e)(6)(ii) on the rules for single-familly rental units.

situations are adequately reliable and create no more than a negligible statistical bias in the GSEs' Housing Goals performance figures relative to the values that they would have if complete income data could be obtained, and whether a more precise method for imputing incomes could be employed. In order to inform HUD's consideration of this issue, HUD requests comments from the public on the following question: Would it be desirable for HUD to have a standard, econometricallybased method for imputing the income distribution of mortgages purchased by each GSE that lack income data, based on known characteristics of the loan and the tract? Income distribution information would be needed that shows proportions of units that are in the very-low-income range (below 60 percent of area median), low-but not very-low income (60–80 percent) and moderate income (80-100 percent), to support estimating proportions of missing-data loans for both the Lowand Moderate-Income Housing Goal and the Special Affordable Housing Goal. For example, the mortgage amount as a percentage of average loan amounts in the tract, or home prices in the local market, might be used in the estimation process. Depending on the type of methodology that is developed, such a procedure might be applied on a geographical level from census tracts up to the United States as a whole. In the latter case one national estimate would be created for the proportion of owneroccupied units lacking income data that qualify for each Goal, for each GSE.

E. Possible Changes to GSE Counting Rules

FHEFSSA establishes housing goals for the GSEs' purchases of mortgages for low- and moderate-income families, special affordable housing (very-low income families and low-income families in low-income areas) and families with properties in underserved areas (see sections 1332-1334) in order to ensure that the GSEs increase the availability to these borrowers of the lower cost financing available through the GSEs. With increasing frequency, the GSEs have entered into large-scale transactions with lenders involving seasoned mortgages to achieve the housing goals. It is possible that some of these transactions may include broad buyback arrangements with the seller for the transaction.

HUD's rules at 24 CFR 81.2 define a "mortgage purchase" to mean a transaction in which a GSE bought or otherwise acquired with cash or other thing of value a mortgage for its portfolio or securitization. HUD counts

the GSEs' performance under the Housing Goals pursuant to HUD's counting rules under 24 CFR 81.15 and 81.16. Both the counting rules and definitions are designed to ensure consistency with the statute and its purposes of increasing the availability of financing for homeowners targeted by the Goals.

In light of HUD's interest in ensuring that transactions are appropriately counted under the law and in accordance with its purposes, HUD asks whether the definition of "mortgage purchase" in §81.2 should be revised in the final rule. Should HUD, for example, further define "transactions in which a GSE bought or otherwise acquired with cash or other thing of value, a mortgage for its portfolio or for securitization" for purposes of ensuring appropriate counting of large transactions and, if so, how? HUD also asks what changes, if any, to HUD's regulations (including. but not limited to, changes to the counting rules at §§ 81.15 and 81.16) are warranted to ensure that the GSEs' large scale transactions further the requirements and purposes of the Housing Goals. Do commenters believe HUD's current rules are sufficiently specific to determine which seasoned mortgage transactions, including largescale transactions, are substantially equivalent to mortgage purchases? If commenters believe the rules are not sufficiently specific, how should the rules be changed?

F. Verification and Enforcement of GSE Data Integrity—Revised § 81.102

1. Summary

The Department's ability to monitor effectively the GSEs' performance under the Housing Goals, and otherwise to carry out its regulatory functions, depends in large measure upon the submission of accurate, complete and current data, information and reports by Fannie Mae and Freddie Mac. The GSEs' Charter Acts require Fannie Mae and Freddie Mac to submit data, information and reports on Housing Goals performance under subsections 307(e) and (f) of the Freddie Mac Charter Act and subsections 309(m) and (n) of the Fannie Mae Charter Act. FHEFSSA also requires the GSEs to submit reports (see section 1327 of FHEFSSA, 12 U.S.C. 4547), and other authorities necessitate that the GSEs submit information for HUD's review (see, for example, section 1325 of FHEFSSA, 12 U.S.C. 4545).

HUD's current GSE regulations at 24 CFR 81.102 make clear that HUD may verify the accuracy and completeness of data, information and reports submitted

by the GSEs, but as a practical matter most verification of data, information and reports occurs well after their submission to the Department, which renders this current verification provision a useful but not immediately effective regulatory control. Indeed, in the case of data and information needed to calculate Housing Goals performance, verification occurs only after such Housing Goals performance has been calculated. Likewise, the information provided in reports ordinarily would not be verified until well after the report is submitted.

For these reasons, the Department has concluded that, to ensure the integrity of the report(s), data submission(s) and other information provided to the Department, additional measures are necessary. Accordingly, as described more fully below, the Department is proposing to revise § 81.102 to: (1) Recodify in paragraph (a) the existing authority under §81.102 which authorizes HUD to independently verify the accuracy and completeness of data, information and reports provided by the GSEs; (2) establish in paragraph (b) certification requirements for the submission of the GSEs' Annual Housing Activities Report (AHAR) and for such other report(s), data submission(s) or information for which certification is requested in writing by HUD; (3) codify in paragraph (c) HUD's process for handling errors, omissions or discrepancies in the GSEs' current year-end data submissions (including the AHAR); (4) clarify in paragraph (d) that HUD may exercise its Housing Goal counting authority by adjusting Goals performance for a current year by deducting miscredits from a previous year caused by errors, omissions or discrepancies in a GSE's prior year data submissions (including the AHAR); and (5) clarify in paragraph (e) that HUD may take enforcement action against the GSEs under section 1341 of FHEFSSA (12 U.S.C. 4581) and section 1345 of FHEFSSA (12 U.S.C. 4585), as implemented by subpart G ("Procedures for Actions and Review of Actions") of HUD's regulations at 24 CFR part 81 for the submission of non-current, inaccurate or incomplete information or data.

2. Background

Under section 1336 of FHEFSSA (12 U.S.C. 4566), HUD is required to monitor and enforce compliance with the Housing Goals. The GSEs each submit quarterly information and semi-annual loan-level data on their mortgage purchases pursuant to their Charters and the requirements of 24 CFR part 81. To fulfill its monitoring responsibility,

HUD conducts two types of verification procedures for this data and information

The first procedure is a recalculation process whereby HUD, using the loanlevel data provided by the GSEs. reconstructs each GSE's Housing Goals performance for the reporting period by applying current counting rules and Housing Goal eligibility criteria to the data provided. These recalculations are conducted immediately upon receipt of the GSEs' loan-level data. If adjustments in performance data are necessary because a GSE has improperly applied counting rules, or HUD discovers some other error during the recalculation process, the Department makes these adjustments at the time recalculation work is done and calculates the GSE's official Housing Goals performance based on the adjustment. HUD publishes the GSEs' official Housing Goal performance figures for the year on its Web site, usually within six months of the end of the reporting year, and includes these figures in other published HUD management and performance reports.

The second type of verification procedure consists of performance reviews, including audit procedures, which occur after the reporting year is closed and Housing Goal results have been announced. Performance reviews evaluate the GSEs' internal controls and related business practices relative to the accuracy, completeness, and appropriateness of the information and data that were provided to HUD and upon which Housing Goals performance was based. These reviews also include sampling tests of source documents and data testing to determine the accuracy of reported data and to review the transactions a GSE relied upon to develop the data. Due to the timing of these reviews, which can begin no earlier than the close of a reporting year, and the extensive sampling work involved, it may take up to 24 months from the date of the report under review for HUD to develop its findings on a reporting year.

3. Independent Verification Authority— § 81.102(a)

As indicated, the Department is first proposing to recodify existing § 81.102 as paragraph (a) in the revised § 81.102. Paragraph (a) would retain HUD's current regulatory authority to independently verify the accuracy and completeness of data, information and reports submitted by a GSE, thereby retaining the Department's authority to conduct on-site verifications, and to carry out performance reviews.

As the Department noted in the preamble to its Housing Goals 1995 final rule, the authority to verify information is derived in part from section 1321 of FHEFSSA (12 U.S.C. 4541), which accords the Secretary "general regulatory power over each enterprise." The Secretary's general regulatory power is in addition to the enumerated powers conferred on the Secretary by FHEFSSA and the GSEs' Charter Acts. The Department also regards verification authority as necessary and incidental to its authority under section 1336 of FHEFSSA to monitor and enforce compliance with the Housing Goals.

Accordingly, the rule would retain in paragraph (a) of § 81.102 its existing regulatory authority to independently verify the accuracy and completeness of data, information and reports submitted by a GSE.

4. Certification—§81.102(b)

The Department is proposing in this rule to require the GSEs to provide a certification in connection with their AHARs submitted under sections 309 (m) and (n) of the Fannie Mae Charter Act or section 307(e) and (f) of the Freddie Mac Charter Act, as applicable, that, among other things, the AHAR is current, complete and does not contain any untrue statement of a material fact as detailed below. The rule would also make clear that the Department could require such certification for such other report(s), data submission(s) or information for which certification is requested in writing by HUD.

Because of the post facto nature of performance reviews, such reviews cannot be the sole means of preventing the submission of incorrect data. HUD believes that certification requirements better serve the end of assuring the integrity of data, information and report(s) (including the AHAR) submitted at the outset and such requirements are consistent with current practice.

Pursuant to its regulatory authority, HUD has in the past, with regard to certain specific matters, required that Fannie Mae and Freddie Mac certify the accuracy, currency and completeness of information and data submitted to the Department. Other financial regulators, such as the Office of Federal Housing Enterprise Oversight (OFHEO), the Securities and Exchange Commission (SEC), and the Federal Deposit Insurance Corporation (FDIC) require similar certifications to ensure the accuracy of information submitted to them. Similarly as the GSEs register their stock with the SEC, they will be required to certify financial statements

and other information submitted to the SEC. Moreover, the recently enacted Sarbanes-Oxley Act of 2002 (P.L. 107–204, approved July 30, 2002) requires certification as a means of ensuring corporate accuracy in, and accountability for, the financial information provided by a corporation to its regulators and to the public (see 15 U.S.C. 7241).

The Department's proposal requiring the GSEs to submit a certification in connection with their AHARs and such other report(s), data submission(s) or information for which certification is requested in writing by the Department, is reasonably related to the Department's performance of its statutory duties under FHEFSSA and is well supported by both statutory and regulatory authority.

Specifically, as stated, section 1321 of FHEFSSA grants the Secretary "general regulatory power" over the GSEs and directs the Secretary to "make such rules and regulations as shall be necessary and proper" to carry out the purposes of FHEFSSA and the GSEs' Charter Acts. The Supreme Court has repeatedly held that a grant to an agency of "general regulatory authority" extends to the agency those unenumerated powers that are "reasonably related to the purposes of the enabling legislation." (See Mourning v. Family Publications Service, Inc., 411 U.S. 356, 369 (1973) (quoting *Thorpe* v. Housing Authority of City of Durham, 393 U.S. 268, 280-281 (1969).) This standard has been accepted by every Federal Court of Appeals. (See, e.g., Action on Smoking and Health v. CAB, 699 F.2d 1209, 1212 (D.C. Cir. 1983).)

Moreover, under section 1336 of FHEFSSA, the Secretary is expressly mandated by Congress to "monitor and enforce [the GSEs'] compliance with the housing goals established under * [FHEFSSA]" and the GSEs' Charter Acts require the GSEs to submit a report to designated Congressional committees and to the Secretary "on [their] activities under subpart B of * [FHEFSSA]." (See section 309(n) of the Fannie Mae Charter Act, 12 U.S.C. 1723a(n); section 307(f) of the Freddie Mac Charter Act, 12 U.S.C.1456(f).) Also, section 309(n)(2)(L) of the Fannie Mae Charter Act and section 307(f)(2)(L) of the Freddie Mac Charter Act expressly grant the Secretary the discretion to require the GSEs to submit in their AHARs "any other information that the Secretary considers appropriate" with respect to their activities under subpart B of FHEFSSA. (Emphasis added.)

The Secretary also is accorded by statute a number of fact finding

functions. These include the authority to require reports (see section 1327 of FHEFSSA), to gather data from the GSEs on their mortgage purchases (see sections 309(m) and (n) of the Fannie Mae Charter Act and sections 307(e) and (f) of the Freddie Mac Charter Act), to monitor and enforce compliance with the housing goals (see section 1336 of FHEFSSA), and to issue subpoenas (see section 1348 of FHEFSSA). These functions in turn permit the Secretary to make factual determinations, such as: (1) Whether a GSE is complying with the Housing Goals; (2) whether a GSE has made a good-faith effort to comply with a housing plan; and (3) whether a GSE has submitted the mortgage information and reports required under sections 309(m) and (n) of the Fannie Mae Charter Act, sections 307(e) and (f) of the Freddie Mac Charter Act and section 1327 of FHEFSSA. The Secretary also is charged with the authority to initiate enforcement actions upon determining that the law has been violated.

Since all of these functions necessitate the submission of current, complete and accurate information, data and reports, a certification requirement is necessary to carrying out these functions.

For these reasons, the Department is proposing to amend §81.102 by adding a new paragraph (b) that requires the GSE senior officer responsible for submitting to HUD the AHAR and such other report(s), data submission(s) or information for which a certification is requested in writing by HUD (referred to in the rule as the "GSE Certifying Official") to submit a certification in connection with such documents.

The rule would require that the GSE certification provide: (1) The GSE Certifying Official has reviewed the particular AHAR, other report(s), data submission(s) or information; (2) to the best of the GSE Certifying Official's knowledge and belief, the particular AHAR, other report(s), data submission(s) or information are current, complete and do not contain any untrue statement of a material fact; (3) to the best of the GSE Certifying Official's knowledge and belief, the AHAR or other report(s), data submission(s) and information fairly present in all material respects the GSE's performance, as required to be reported by section 309(m) or (n) of the Fannie Mae Act, section 307(e) or (f) of the Freddie Mac Charter Act, or other applicable legal authority; and (4) to the best of the GSE Certifying Official's knowledge and belief, the GSE has identified in writing any areas in which the GSE's particular AHAR, other

report(s), data submission(s) or information may differ from HUD's written articulations of its counting rules including, but not limited to, the regulations under 24 CFR part 81, and any other areas of ambiguity.

5. Adjustment To Correct Current Year-End Errors, Omissions or Discrepancies—§ 81.102(c)

The Department is proposing to add a new paragraph (c) to § 81.102 that would largely codify its administrative practice regarding errors, omissions or discrepancies it discovers relative to HUD's regulations and/or other guidance concerning how current year data are reported by a GSE and provide the GSEs with a mechanism upon which to comment.

Under this paragraph, the Department is proposing to notify the GSE initially by telephone or e-mail transmission of errors, omissions or discrepancies in current year-end data reporting relative to HUD's regulations and other guidance. The GSE has five business days to respond to such notification. If each error, omission or discrepancy is not resolved to the Department's satisfaction, HUD will then notify the GSE in writing and seek clarification or additional information to correct the error, omission or discrepancy. The GSE will have 10 business days from the date of HUD's written notice to respond in writing to the request (or such longer time as HUD may establish, not to exceed 30 business days). If the GSE fails to submit a written response to HUD within the 10-day (or longer) time period, or if HUD determines that the GSE's written response fails to explain or correct the error, omission or discrepancy in its current year-end reported data submissions (including the AHAR) to HUD's satisfaction, the Department will determine the appropriate adjustments to the numerator and the denominator to calculate performance under the applicable Housing Goal(s) and/or Subgoal(s). The Department's determination may involve excluding the unit(s) or mortgage(s) from the numerator and including them in the denominator of the applicable Housing Goal(s) and/or Subgoal(s). The Department may also pursue additional enforcement actions against the GSE under § 81.102(e), if it determines that such action is warranted.

The Department's legal authority to implement this provision also is based upon its general regulatory power over each enterprise pursuant to section 1321 of FHEFSSA and its explicit statutory authority under section 1336 of FHEFSSA to monitor and enforce the

GSE's compliance with the Housing Goals. In addition, this provision is predicated upon the Department's existing regulatory authority under 24 CFR 81.102 to independently verify the accuracy and completeness of data, information and reports submitted by a GSE.

6. Adjustment To Correct Prior Year Reporting Errors—§ 81.102(d)

The Department is proposing to add a new paragraph (d) to §81.102 that would provide for effective regulatory oversight and enforcement when it determines that a GSE has, in a prior year, improperly calculated its performance under one or more Housing Goals and/or Subgoals as a result of errors, omissions or discrepancies in its data submissions (including its AHAR).

As background for this proposal, notably unlike financial reporting where results are cumulative from year to year and the results of adjustments in prior years carry forward to the current year, the GSEs' Housing Goal performance reports (the Annual Housing Activity Reports) impact only the current reporting year. This means that, unlike financial reporting, if corrections are not made prior to release of HUD's official performance data for the reporting year, any subsequent corrections to that data for that year are likely to go unnoticed by the public and policy makers.

In addition, if a correction is such that it would have caused failure under a Housing Goal that was previously reported as having been achieved, HUD's enforcement remedies under section 1336 of FHEFSSA would have little relevance as they only require a GSE to submit a housing plan to ensure compliance with the Housing Goals in the current or subsequent calendar year.

For these reasons, it is not practical to correct overstatements in performance data that were reported in previous years by adjusting performance for a prior year. On the other hand, adjustments to current year performance are an effective means of assuring accuracy in counting under the Housing Goals in a manner that makes the public aware of the adjustment. Accordingly, the Department is proposing to add a new paragraph (d) to §81.102 that would enable it to reduce a GSE's current year credit toward its Housing Goals performance based on errors, omissions or discrepancies that the Department discovers in a GSE's prior year's data submissions (including its AHAR)

This procedure, to be known as an "adjustment to correct prior year reporting errors, omissions or discrepancies," would provide the

Department with a mechanism for ensuring the continued accuracy. completeness and currency of each GSE's performance results. The Department anticipates that the procedure would be used infrequently. Even so, given the increasing complexity of each GSE's business as well as the complexity of many of the transactions that the GSEs use to meet their Housing Goals, the Department believes that the proposed procedure is both reasonable and necessary. Should its use become necessary, the proposed procedure will provide a means for HUD to effect corrections in a manner that is appropriate and obvious to those who track the GSEs' performance annually, and it will help to ensure that the GSEs continue to exercise appropriate diligence in their Housing Goals reporting.

The Department's proposed procedure would provide that the Department may adjust a GSE's current year Housing Goal performance to correct for any overstatement in Housing Goals reporting discovered in the course of performance reviews or otherwise of any previous year's Annual Housing Activity Report that were the result of errors, omissions or discrepancies. Should the Department determine that an adjustment to current year data for a prior year error, omission or discrepancy in Housing Goal reporting is warranted, the Department would communicate its initial findings and determinations in writing to the GSE within 24 months of the end of the relevant reporting year. The GSE would have 30 days from the date of HUD's initial letter to respond in writing, with supporting documentation, to contest the determination. Within 60 days of the date of the GSE's written response, the Department would issue a final determination letter to the GSE (unless HUD determines that good cause exists to extend this period for an additional 30 days.)

If the GSE fails to submit a written response to HUD within the 30-day period, or if the Department otherwise determines that an adjustment is warranted, the GSE would be required to reflect an adjustment in its Annual Housing Activity Report for the current year, as directed by HUD. The adjustment would be reflected in the GSE's year-end performance under the applicable Housing Goal(s) or Subgoal(s) for the current reporting year by deducting the number of units or mortgages that HUD has determined were erroneously counted in a previous year from the numerator (but not the denominator) for the relevant Housing Goal or Subgoal.

The Department proposes that this provision will become effective upon publication of the final rule for reporting periods occurring on or after the rule's effective date. It will not be retroactive to reporting periods that preceded publication of the final rule. Should any adjustment cause a failure under a Housing Goal in the current year, then current year Housing Goals performance would be subject to enforcement under sections 1336, 1341, and 1345 of FHEFSSA, and subpart G of part 81.

As noted, section 1321 of FHEFSSA grants the Secretary "general regulatory power over each enterprise" which includes the authority to "make such rules and regulations as shall be necessary and proper to ensure that [Part 2, Subtitle A, of FHEFSSA] and the purposes of [the GSEs' Charter Acts] are accomplished." The Secretary's general regulatory power under section 1321 is in addition to the specific enumerated powers conferred on the Secretary by FHEFSSA and the GSEs' Charter Acts.

Moreover, also as noted, section 1336 of FHEFSSA—under which the Secretary is mandated by Congress to "monitor and enforce compliance with the housing goals established under sections 1332, 1333, and 1334, as provided in this section * $\,^*$ expressly authorizes HUD to establish guidelines to measure the extent of compliance with the Housing Goals. Section 1336 further authorizes HUD to "assign full credit, partial credit, or no credit toward achievement of the Housing Goals to different categories of mortgage purchase activities of the enterprises, based on such criteria as the Secretary deems appropriate.' (Emphasis added.)

The Department's proposal to grant only partial credit to a GSE in its current year performance report to correct for a prior year's error constitutes an appropriate counting criterion to assure the accuracy of data used to assess GSE performance under the Housing Goals.

7. Additional Enforcement Provisions— §81.102(e)

Finally, the rule would make clear that a GSE's submission of data, information, or reports required by section 307(e) or (f) of the Freddie Mac Charter Act, section 309(m) or (n) of the Fannie Mae Charter Act or subpart E of part 81 that are incomplete, not current, or contain an untrue statement of material fact shall be regarded by the Department as equivalent to failing to submit such data, information or reports. For such a non-submission, the Department may bring under subpart G of part 81 an order to cease and desist

and/or to levy civil money penalties in connection with a GSE's failure to comply with its statutory obligations under its Charter Act and FHEFSSA.

III. Discussion of Proposed Regulatory Changes

A. Subpart A—General

Section 81.2—Definitions

The proposed regulation would change several current definitions in § 81.2, and add a new definition to this section. First, to conform HUD's regulations to changes in data collection practices made by the Office of Management and Budget (OMB), HUD's proposed regulation would change the current definitions of "Metropolitan area" and "Minority." Second, the proposed regulation would modify the current definition of "Underserved area." Finally, the proposed regulation would add a new definition for "Home Purchase Mortgage" consistent with this proposal.

proposal.

"Metropolitan area"—The proposed regulation would change the current definition of "metropolitan area" to remove the term "primary metropolitan statistical area ("PMSA")" since this is a term that is no longer used by the Office of Management and Budget (OMB) in defining "metropolitan area." See Office of Management and Budget, Standards for Defining Metropolitan and Micropolitan Statistical Areas, 65 FR 82228–82238 (December 27, 2000)

FR 82228–82238 (December 27, 2000). "Minority"—The proposed regulation would also change the definition of the term "minority" in light of significant changes in reporting conventions for race and ethnicity, in accordance with OMB guidance.

Currently, "minority" is defined in HUD regulations as "any individual who is included within any one" of the following list of racial and ethnic categories (emphasis added). The proposed regulation would change the definition of minority to "any individual who is included within any one or more" of the following list of racial and ethnic categories (emphasis added). This change is consistent with a decision made by OMB in 1997, revising federal data classification standards on race and ethnicity, to allow individuals, in federal data collection, to identify themselves in more than one category. See Office of Management and Budget, Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity, 62 FR 58781-58790 (October 30, 1997).

Also, consistent with OMB determinations, the proposed regulation would change the current definition of "minority" so that: (1) "American

Indian" would be defined to include persons with origins in any of the original peoples of South and Central America; (2) "Asian or Pacific Islander" would be divided into separate categories—"Asian," which would include examples of countries of origin, and "Pacific Islander" which would be included in a new definition with "Native Hawaiian" (which would include "peoples having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands;" (3) "African-American" would be changed to "Black or African American;" and (4) "Hispanic" would be changed to "Hispanic or Latino."

"Underserved area"—As discussed more fully above (see section II.C), the proposed regulation would change the definition of "Underserved area" for purposes of determining whether a "Rural area" is an underserved area.

"Home Purchase Mortgage"—
Consistent with the proposed
establishment of Home Purchase
Subgoals, the proposed regulation
would add a definition for "Home
Purchase Mortgage," which would be
defined to mean a residential mortgage
for the purchase of an owner-occupied
single-family property.

B. Subpart B—Housing Goals

1. Background

The Department is required to establish, by regulation, annual Housing Goals for each GSE. The Goals include a Low- and Moderate-Income Housing Goal, a Special Affordable Housing Goal, and a Central Cities, Rural Areas, and Other Underserved Areas Housing Goal (the Underserved Areas Housing Goal). Section 1331(a) of FHEFSSA requires HUD to establish these Goals in a manner consistent with sections 301(3) of the Fannie Mae Charter Act and 301(b)(3) of the Freddie Mac Charter Act, which require the GSEs "to provide ongoing assistance to the secondary market for residential mortgages (including * * * mortgages on housing for low- and moderateincome families involving a reasonable economic return that may be less than the return earned on other activities)." Under section 1331(c) of FHEFSSA, HUD may, by regulation, adjust any Housing Goal from year to year.

In October 2000, HUD established Housing Goals for the GSEs for 2001–2003, revising and restructuring the Goals that had been in effect for 1996–2000. The current Housing Goal levels, which were in place for 2001–2003 and extended through 2004 without the bonus points and Temporary Adjustment Factor, are:

- A Low- and Moderate-Income Housing Goal, which focuses on mortgages on housing for families with incomes no greater than area median income (as defined by HUD),⁸ and which is set at 50 percent of total units financed by each of the GSEs' mortgage purchases;
- An Underserved Areas Housing Goal, which focuses on mortgages on properties located in "underserved areas," defined as low-income and/or high-minority census tracts and rural counties (excluding high-income, high-minority tracts), and which is set at 31 percent of total units financed by each of the GSEs' mortgage purchases in 2001–2004;
- A Special Affordable Housing Goal, which focuses on mortgages on housing for very low-income families and low-income families living in low-income areas, and which is set at 20 percent of total units financed by each of the GSEs' mortgage purchases in 2001–2004; and
- A Special Affordable Multifamily Subgoal, which focuses on mortgages on housing for very low-income families and low-income families living in lowincome areas, in multifamily properties (defined as properties with five or more units), and which is set at a fixed amount of 1.0 percent of the average total dollar volume of mortgages purchased by each GSE in the years 1997, 1998, and 1999. This formula results in a Subgoal of special affordable multifamily mortgage purchases totaling \$2.85 billion per year for Fannie Mae and \$2.11 billion per year for Freddie Mac for each calendar year from 2001 through 2004.

These Housing Goals, excluding the Special Affordable Multifamily Subgoal, share common characteristics: (1) The Goal levels are the same for both GSEs; (2) they are percentage based Goals defined in terms of percentages of housing units financed; and (3) one unit may qualify for one or more Goals. In addition, under the current regulation, Goals were established based on consideration of the statutory factors and set for a three-year period from 2001 through 2003 to allow the GSEs time to develop long-range strategies.

A key factor in determining the level of the Goals was and is the estimated size of the conventional market for each Goal. This determination is discussed above and in Appendix D. HUD estimates that the low- and moderate-income market accounted for 54–59 percent of all mortgages originated during the 1997 to 2002 period, and for 54–55 percent in 2001 and 2002. The special affordable market accounted for

26–30 percent for 1997–2002, and 26–27 percent for 2001–2002. The underserved areas market defined in terms of 1990 Census data and pre-2003 metropolitan area boundaries accounted for 31–35 percent for 1997–2002 and 32–33 percent for 2001–2002. With 2000 Census data and the metropolitan area boundaries established in June, 2003, these figures become 37–40 percent for 1999–2002 and 37–39 percent for 2001–2002

In accordance with FHEFSSA, HUD has re-estimated the market shares of the mortgages in the primary conventional market that would qualify for each of the GSEs' Housing Goals for the years 2005 through 2008.9 HUD estimates that for the years 2005 through 2008 the low- and moderate-income share of the conventional market will be 51-57 percent, the underserved areas share of the market will be 35-40 percent, and the special affordable share will be 24–28 percent. Appendix D, "Estimating the Size of the Conventional Conforming Market for Each Housing Goal," provides an extensive analysis of the Department's market share estimates.

The gaps between the current Goal levels and HUD's latest market estimates indicate that the Goals should be higher and that there are ample opportunities available for the GSEs to meet the new initial Goals in 2005 as they institute measures to ensure that they will attain the increased goal levels in 2006–2008. Moreover, HUD's new market estimates allow for more adverse economic and affordability conditions than recently experienced. For example, the lower end—51 percent—of the range for the low- and moderate-income market estimate is consistent with low- and moderate-income borrowers accounting for 38 percent of home purchase loans in the single-family owner-occupied market. (The remainder of the low- and moderate-income market share estimate includes multifamily and single-family rental properties.) Since the 1995–2002 average for the low- and moderateincome share of the home purchase market was 43.5 percent, and the more recent 1999-2002 average was 44.6 percent, the initial Goals for 2005 allow leeway for more adverse income and interest rate conditions.

⁹ The Goal-qualifying market shares are estimated

for the years 2005–2008 under several projections about the relative sizes of the single-family and multifamily markets. Numerous sensitivity analyses that consider alternative market and economic conditions are examined in Appendix D.

⁸²⁴ CFR 81.2.

2. Low- and Moderate-Income Housing Goal, § 81.12

This section discusses the Department's consideration of the statutory factors in arriving at the new Housing Goal level for the Low- and Moderate-Income Housing Goal, which targets mortgages on housing for families with incomes at or below the area median income. After analyzing the statutory factors, this proposed rule would establish (a) a Goal of 52 percent for the percentage of the total number of dwelling units financed by each GSE's mortgage purchases for housing affordable to low- and moderate-income families for 2005, rising to 53 percent in 2006, 55 percent in 2007, and 57 percent in 2008, and (b) a Subgoal of 45 percent of the total number of owneroccupied dwelling units financed by each GSE's purchases of home purchase mortgages in metropolitan areas that are

for housing affordable to low- and moderate-income families for 2005, rising to 46 percent in 2006, 47 percent in 2007, and 47 percent in 2008.

A short discussion of the statutory factors reviewed to establish the Goal follows. More detailed information analyzing each of the statutory factors is provided in Appendix A, "Departmental Considerations to Establish the Lowand Moderate-Income Housing Goal," and Appendix D, "Estimating the Size of the Conventional Conforming Market for each Housing Goal."

a. Market Estimate for the Low- and Moderate-Income Housing Goal

The Department estimates that dwelling units serving low- and moderate-income families will account for 51–57 percent of total units financed in the overall conventional conforming mortgage market during the period 2005 through 2008. HUD has developed this

range, rather than a specific point estimate, to account for the projected effects of different economic and affordability conditions that can reasonably be anticipated. HUD estimates that low- and moderate-income share of the market averaged 57 percent between 1999 and 2002.

b. Past Performance of the GSEs under the Low- and Moderate-Income Housing Goal

As discussed above, a number of changes in Goal-counting procedures were adopted as part of HUD's Housing Goals 2000 final rule. Thus, it is necessary to provide information using several different measures in order to track performance on the Low- and Moderate-Income Housing Goal over the 1996–2002 period. Table 3 shows performance under these measures.

Table 3

GSE Performance on the Low- and Moderate-Income Housing Goal, 1996-2002, and Proposed Goals for 2005-08

									2005-08 Proposed Goals	posed Goals	
	1996	1997	1998	1999	2000	2001*	2002*	2005	2006	2007	2008
Goal Levels: Actual Proposed	40%	42%	42%	42%	42%	50%	20%	52%	53%	25%	57%
Fannie Mae Goal Performance	45.60%	45 70.	44 10%	45.0%	40.5%	51 58	51 80%				
2001-03 Baseline**	46.8%	47.5%	45.1%	46.8%	51.3%	49.2%	49.0%				
With 2005 Assumptions***				46.3%	51.2%	48.7%	47.9%				
Freddie Mac Goal Performance Official	41.1%	42.6%	42.9%	46.1%	49.9%	53.2%	51.4%				
2001-03 Baseline** With 2005 Assumptions***	41.2%	42.7%	43.2%	46.6% 46.0%	50.6% 50.2 %	47.7%	46.5% 45.0 %				

counting rules for 2001-03 differ from those that were in effect for 1996-2000, as discussed in the text. Goal performance is based on official HUD results. * Goal level and official performance in 2001-03 are not directly comparable with goal level and performance in 1996-2000, because the goal performance

without any use of 2000 census data in estimating area median incomes; census tract boundaries as of the 1990 census; and metropolitan area boundaries ** "2001-03 Baseline" represents performance under current scoring rules (which exclude bonus points and Freddie Mac temporary adjustment factor), prior to their re-specification by the Office of Management and Budget in June, 2003. *** "2005 Assumptions" represents performance under current scoring rules (which are proposed to continue for 2005-2008) with 2000 census data used in estimating area median incomes; census tract boundaries as of the 2000 census; and the Office of Management and Budget's specification of metropolitan area boundaries as of June, 2003. Specifically, the following changes were made in counting procedures for measuring performance on the Low- and Moderate-Income Housing Goal for 2001–03. HUD:

(a) Established "Bonus points" (awarding double credit) for purchases of low- and moderate-income mortgages on small (5–50 unit) multifamily properties and, above a threshold level, mortgages on 2–4 unit owner-occupied properties;

(b) Established a "temporary adjustment factor" (1.35 units credit, as revised by Congress for 2001–03 from HUD's 1.2 unit credits in the 2000 rule) that applied to Freddie Mac's purchases (but not Fannie Mae's purchases) of low- and moderate-income mortgages on large (more than 50-unit) multifamily properties; and

(c) Revised procedures that HUD had instituted regarding the treatment of missing data on unit affordability, the use of imputed or proxy rents for determining Goal credit for multifamily mortgages, and the eligibility for Goals credit for certain qualifying government-backed loans.

Based on the counting rules in effect at that time for 1996-2000, as shown under "official performance" for 1996-2000 in Table 3, Low- and Moderate-Income Housing Goal performance for Fannie Mae was consistently in the 44– 46 percent range over the 1996–1999 period, before jumping to a peak of 49.5 percent in 2000. Freddie Mac's performance started at a lower level, but then increased in several steps, from 41-43 percent in 1996-98 to 46.1 percent in 1999, and a record level of 49.9 percent in 2000. That was the only year prior to 2001 in which Freddie Mac's performance has exceeded Fannie Mae's performance on this Goal.

Based on the then current counting rules, including the bonus points and TAF, as shown under "official performance" in Table 3, Low- and Moderate-Income Housing Goal performance in 2001 was 51.5 percent for Fannie Mae and 53.2 percent for Freddie Mac. Low- and Moderate-Income Housing Goal performance in 2002 was 51.8 percent for Fannie Mae and 51.4 percent for Freddie Mac.

Immediately beneath the official Lowand Moderate-Income Housing Goal performance percentages in Table 3 are figures showing the GSEs' low- and moderate-income purchase percentages on a consistent basis for the entire 1996–2002 period. The assumptions used were the scoring rules established in HUD's Housing Goals 2000 Final Rule except that bonus points and the Freddie Mac Temporary Adjustment Factor (which were terminated at the end of 2003) are not applied. These figures are termed the "2001–03 baseline assumptions." For 1996–2000 these figures differ from the official performance figures because they incorporate the revised counting procedures described under point (c), above, which were not reflected in the official performance figures at that time. For 2001 and 2002 both sets of figures incorporate the revised counting procedures, but the baseline does not incorporate the bonus points and the Freddie Mac Temporary Adjustment Factor.

In terms of the 2001–2003 baseline measure, both Fannie Mae and Freddie Mac's low- and moderate-income performance reached its maximum in 2000 (Fannie Mae at 51.3 percent and Freddie Mac at 50.6 percent) before declining somewhat in 2001 and 2002. Both GSEs' baseline performance in 2001 exceeded the level attained in 1999. However, Freddie Mac's baseline performance fell further in 2002, to approximately the same level as in 1999. Fannie Mae's baseline performance was essentially unchanged in 2002.

Overall, both GSEs' performance exceeded HUD's Low- and Moderate-Income Housing Goals by significant margins in 1996–99, and by wide margins in 2000. New, higher Goals were established for 2001–03, and despite somewhat lower performance than the level attained in 2000, both GSEs' official performance exceeded the new goal levels in 2001 and 2002, with the inclusion of the bonus points and the TAF.

The decline in baseline performance in 2001 and 2002 can be attributed in large measure to the mortgage refinance wave that occurred in those years. Fannie Mae's overall volume of mortgage purchases (in terms of numbers of housing units) rose from 2.2 million in 2000 to 4.7 million in 2001, and then to 6.0 million in 2002. Similarly, Freddie Mac's volume rose from 1.6 million in 2000 to 3.3 million in 2001, and then to 4.3 million in 2002. For each GSE the increase in volume each year can be largely attributed to increases in purchase volumes for refinance mortgages relative to home purchase mortgages. For each GSE, the fraction of mortgages that qualified as Low- and Moderate-Income was less for refinance mortgages than for home purchase mortgages.

For 2005–2008 HUD does not propose to change the current procedures regarding the treatment of missing data on unit affordability, the use of imputed or proxy rents for determining Goal credit for multifamily mortgages, or the

eligibility for Goal credit of certain qualifying government-backed loans. That is, the Department does not plan to change the 2001–03 baseline assumptions for scoring loans under the Low- and Moderate-Income Housing Goal.

Beneath the 2001-03 baseline figures in Table 3 is another row of figures designated "With 2005 Assumptions." These figures show the effects of applying 2000 Census data and the new specification of Metropolitan Statistical Areas released by the Office of Management and Budget in 2003 to the measurement of Low- and Moderate-Income purchase percentages with the same counting rules that were used for the 2001–03 baseline. The effect is to reduce the Goal-qualifying percentage by an average of 0.5 percentage points for Fannie Mae and 0.8 percentage points for Freddie Mac, over the fouryear period.

c. Proposed Low- and Moderate-Income Home Purchase Subgoal for 2005–2008

The Department proposes to establish a Subgoal of 45 percent of each GSE's purchases of home purchase mortgages on single-family owner-occupied properties in metropolitan areas which are for low- and moderate-income families in 2005, with this Subgoal rising to 46 percent in 2006 and 47 percent in both 2007 and 2008. The purpose of this Subgoal is to encourage the GSEs to increase their acquisitions of home purchase loans for low- and moderate-income families, many of whom are expected to enter the homeownership market over the next few years. If the GSEs meet this Subgoal, in 2005 they will be leading the primary market by approximately one percentage point, based on the income characteristics of home purchase loans reported in HMDA. Between 1999 and 2002, HMDA data show that low- and moderate-income families accounted for an average of 44.3 percent of singlefamily-owner loans originated in the conventional conforming market of metropolitan areas. Loans in the B&C portion of the subprime market are not included in these averages. To reach the 45-percent Subgoal for 2005, both GSEs must improve their average performance, as shown in Table 2— Fannie Mae by about one percentage point over its average performance of 44.2 percent during 2001 and 2002, and Freddie Mac by 2.4 percentage points over its average performance of 42.6 percent; these required improvements will increase further by one percentage point in 2006 and an additional one percentage point in 2007-08 under HUD's proposal.

As explained above, HUD will be rebenchmarking its median incomes for metropolitan areas and nonmetropolitan counties based on 2000 Census median incomes, and will be incorporating the effects of the new OMB metropolitan area definitions. HUD projected the effects of these two changes on the low- and moderateincome shares of the single-familyowner market for the years 1999-2002. These estimates will be referred to as "projected data" while the 1990-based data reported above will be referred to as "historical data." The average lowmod share of the home purchase market (without B&C loans) was 43.1 percent based on projected data, as compared with 44.3 percent based on historical data. Thus, based on projected data, the proposed 45-percent Home Purchase Subgoal for 2005 is approximately two percentage points above the 1999–2002 market average. Fannie Mae's average low-mod performance between 1999 and 2002 based on the projected data was 41.4 percent, compared with 42.5 percent based on historical data. To reach the 45-percent Subgoal based on projected data, Fannie Mae would have to improve its performance in 2005 by 2.3 percentage points over its projected average performance of 42.7 percent in 2001 and 2002, or by 1.4 percentage points over its projected 2002 low-mod performance of 43.6 percent. Freddie Mac's average low-mod performance between 1999 and 2002 based on the projected data was 40.9 percent, compared with 42.3 percent based on historical data. To reach the 45-percent Subgoal based on projected data, Freddie Mac would have to improve its performance in 2005 by 4.0 percentage points over its projected average performance of 41.0 percent in 2001 and 2002, or by 2.9 percentage points over its projected 2002 low-mod performance of 42.1 percent.

Section II.B.2 of this preamble and Section I of Appendix A discuss the reasons why the Department is establishing the Subgoal for low- and moderate-income loans, as follows: (1) The GSEs' have the resources and the ability to lead the market in providing mortgage funding for low- and moderate-income families; (2) the GSEs have generally not led the market, even though they have the ability to do so; (3) troublesome disparities in our housing and mortgage markets indicate a continuing need for increased GSE activity; and (4) there are ample opportunities for the GSEs to improve their low- and moderate-income performance in the home purchase market. Although single-family-owner

mortgages comprise the "bread-andbutter" of their business, the GSEs have historically lagged behind the primary market in financing mortgages for lowand moderate-income families. Because home purchase loans account for a major share of the GSEs' purchases, the establishment of this Subgoal will aid their performance under the overall Low- and Moderate-Income Housing

For the foregoing reasons, the Department believes that the GSEs can do more to raise the share of their home loan purchases serving low- and moderate-income families. This can be accomplished by building on efforts that the enterprises have already started, including their new affordable lending products, their many partnership efforts, their outreach to inner city neighborhoods, their incorporation of greater flexibility into their underwriting guidelines, and their purchases of seasoned CRA loans. A wide variety of quantitative and qualitative indicators indicate that the GSEs' have the resources and financial strength to improve their affordable lending performance enough to lead the market serving low- and moderateincome families.

d. Proposed Goal Levels for 2005-2008

The Department is proposing to increase the Low- and Moderate-Income Housing Goal to 52 percent for 2005, 53 percent in 2006, 55 percent in 2007, and 57 percent in 2008. The reasons for increasing the Low- and Moderate-Income Housing Goal are discussed in Section a, above. While the GSEs have lagged the primary market in funding low- and moderate-income loans, they appear to have ample room to improve their performance in that market. The GSEs' mortgage purchases between 1999 and 2002 accounted for 49 percent of the total (single-family and multifamily) conforming mortgage market, but they accounted for only 42 percent of the low- and moderate-income market. A wide variety of quantitative and qualitative indicators demonstrate that the GSEs' have the expertise, resources and financial strength to improve their low- and moderate-income lending performance and close their gap with the market.

3. Central Cities, Rural Areas, and Other Underserved Areas Goal, §81.13

This section discusses the Department's consideration of the statutory factors in arriving at the proposed new housing goal level for the Underserved Areas Housing Goal.

The Underserved Areas Housing Goal focuses on areas of the nation currently

underserved by the mortgage finance system. The 1995 rule provided that mortgage purchases count toward the Underserved Areas Housing Goal if such purchases finance properties that are located in underserved census tracts. At 24 CFR 81.2 of HUD's current rules. HUD defines "underserved areas" for metropolitan areas (in central cities and other underserved areas) as census tracts where either: (1) the tract median income is at or below 90 percent of the area median income (AMI); or (2) the minority population is at least 30 percent and the tract median income is at or below 120 percent of AMI. The AMI ratio is calculated by dividing the tract median income by the MSA median income. The minority percent of a tract's population is calculated by dividing the tract's minority population by its total population.

For properties in non-metropolitan (rural) areas, mortgage purchases count toward the Underserved Areas Housing Goal where such purchases finance properties that are located in underserved counties. These are defined as counties where either: (1) the median income in the county does not exceed 95 percent of the greater of the median incomes for the non-metropolitan portions of the state or of the nation as a whole; or (2) minorities comprise at least 30 percent of the residents and the median income in the county does not exceed 120 percent of the greater of the median incomes for the nonmetropolitan portions of the state or of

the nation as a whole.

This proposed rule bases its proposed level for the Underserved Areas Housing Goal on 2000 Census data on area median incomes and minority percentages for census tracts, counties, MSAs, and the non-metropolitan portions of states and of the entire nation. HUD's analysis, which is sketched below and described in greater detail in Appendix B, has revealed that the effect of using 2000 Census data rather than 1990 data to determine whether areas are underserved increase the percentages of the GSEs' mortgage purchases in underserved areas by an estimated average of 5 percentage points for Fannie Mae and 4 percentage points for Freddie Mac, based on the geographic locations of the GSEs' mortgage purchases in 1999 through 2002. This change reflects geographical shifts in population concentrations by income and minority status from 1990 to 2000. It is for this reason that HUD's proposed level of the Underserved Areas Housing Goal is greater than the existing level by several percentage points more than the increase in the other two Goals.

After analyzing the statutory factors, this proposed rule would: (a) Establish a Goal of 38 percent for the percentage of the total number of dwelling units financed by each GSE's mortgage purchases for properties located in underserved areas for 2005, 39 percent for 2006 and 2007, and 40 percent for 2008; (b) establish census tracts as the spatial basis for establishing whether properties in non-metropolitan (rural) areas count toward the Underserved Areas Housing Goal, in place of counties as in the definition stated above, for the reasons described below; and (c) also establish a Subgoal of 33 percent of the total number of dwelling units financed by each GSE's purchases of home purchase mortgages in metropolitan areas for properties located in underserved areas of metropolitan areas for 2005, rising to 34 percent for 2006, and 35 percent for 2007 and 2008;

A short discussion of the statutory factors reviewed in establishing the Goal follows. Additional information analyzing each of the statutory factors is provided in Appendix B, "Departmental Considerations to Establish the Central Cities, Rural Areas, and Other Underserved Areas Goal," and Appendix D, "Estimating the Size of the Conventional Conforming Market for Each Housing Goal."

a. Market Estimate for the Underserved Areas Housing Goal

The Department estimates that dwelling units in underserved areas will account for 35–40 percent of total units financed in the overall conventional conforming mortgage market during the period 2005 through 2008. HUD has developed this range, rather than a specific point estimate, to accommodate the projected effects of different

economic and affordability conditions that can reasonably be anticipated. HUD estimates that the underserved areas market averaged 39 percent between 1999 and 2002.

b. Past Performance of the GSEs under the Underserved Areas Housing Goal

As discussed above, a number of changes in goal-counting procedures were adopted as part of HUD's Housing Goals 2000 final rule. Thus it is necessary to provide information using several different measures in order to track changes in the GSEs' performance on the Underserved Areas Housing Goal over the 1996–2002 period. These are shown in Table 4. The same changes in counting rules described for the Lowand Moderate-Income Housing Goal are applicable to the Underserved Areas Housing Goal.

BILLING CODE 4210-27-P

Table 4

GSE Performance on the Underserved Areas Housing Goal, 1996-2002, and Proposed Goals for 2005-08

1996	1997 1998 1	1999	2000	2001*	2002*	2005	2005-08 Pr 2006	2005-08 Proposed Goals 2006 2007	2008
24%	24% 2	24%	24%	31%	31%	38%	39%	39%	40%
28.8%	27.0% 2(%8.9	31.0%	32.6%	32.8%				
28.9%		%8.9:	31.0%	30.4%	30.2%				
	33	2.5%	38.2%	36.4%	35.7%				
	ж	31.6%	37.5%	35.7%	35.0%				
26.3%	26.1% 27	7.5%	29.2%	31.7%	31.9%				
26.3%		7.6%	29.2%	28.2%	28.4%				
	35	32.4%	34.8%	33.3%	33.5%				
	31	1.6%	34.1%	32.5%	32.8%				

counting rules for 2001-03 differ from those that were in effect for 1996-2000, as discussed in the text. Goal performance is based on official HUD results. * Goal level and official performance in 2001-03 are not directly comparable with goal level and performance in 1996-2000, because the goal performance

census data used to determine underserved areas; census tract boundaries as of the 1990 census; and metropolitan area boundaries prior to their re-specification by ** "2001-03 Baseline" represents performance under current scoring rules (which exclude bonus points and Freddie Mac temporary adjustment factor), with 1990 the Office of Management and Budget in June, 2003.

*** "2005 Assumptions (Counties)" represents performance under current scoring rules (which are proposed to continue for 2005-2008); 2000 census data used to determine underserved areas; census tract boundaries as of the 2000 census; and the Office of Management and Budget's specification of metropolitan area boundaries as of June, 2003. "2005 Assumptions (Tracts)" incorporates the effects of the Departments's proposal to begin using tracts rather than counties to define non-metropolitan underserved areas in 2005.

Based on the counting rules in effect at that time, as shown under "official performance" for 1996-2000 in Table 4, Underserved Areas Housing Goal performance for Fannie Mae generally fluctuated in the range between 27 and 29 percent over the 1996–99 period, before rising to a peak of 31.0 percent in 2000. Freddie Mac's performance started at a lower level, but then increased in several steps, from 25-26 percent in 1996–98 to 27.5 percent in 1999, and a record level of 29.2 percent in 2000. Freddie Mac's performance in 1999 was the only year prior to 2001 in which it exceeded Fannie Mae's performance on this Goal.

Based on current counting rules, including the bonus points and the TAF, as shown under "official performance" for 2001 in Table 4, Underserved Areas Housing Goal performance in 2001 was 32.6 percent for Fannie Mae and 31.7 percent for Freddie Mac. Underserved Areas Housing Goal performance in 2002 was 32.8 percent for Fannie Mae and 31.9 percent for Freddie Mac.

Immediately beneath the official Underserved Areas Housing Goal performance percentages in Table 4 are figures showing the GSEs' purchase percentages under this Goal on a consistent basis for the entire 1996-2002 period. The assumptions used were the scoring rules established in HUD's Housing Goals 2000 Final Rule, except that bonus points and the Freddie Mac Temporary Adjustment Factor (which terminated at the end of 2003) are not applied. These figures are termed the "2001-03 baseline" assumptions. For 1996-2000 these figures differ from the official performance figures because they incorporate the revised counting procedures, which were not reflected in the official performance figures at that time. For 2001 and 2002 both sets of figures incorporate the revised counting procedures, but the baseline does not incorporate the bonus points and Freddie Mac Temporary Adjustment

In terms of the 2001–2003 baseline measure, both Fannie Mae and Freddie Mac's Underserved Areas Housing Goal performance reached its maximum in 2000 (Fannie Mae at 31.0 percent and Freddie Mac at 29.2 percent) before declining somewhat in 2001 and 2002. Both GSEs' baseline performance in 2001 and 2002 exceeded the level attained in 1999.

Overall, both GSEs' official performance exceeded their Underserved Areas Housing Goal by significant margins in 1996–99, and by wide margins in 2000. New, higher Goals were established for 2001–03, and despite somewhat lower performance than the level attained in 2000 (largely due to the 2001–02 refinance wave), both GSEs' performance exceeded the new Goal levels in 2001 and 2002.

Appendix B includes a comprehensive analysis of the GSEs' performance in funding mortgages for single-family-owner properties in underserved areas. (The data reported there are based on 2000 Census geography, which produces underserved area figures slightly over five percentage points higher than 1990-based geography.) Between 1999 and 2002, 28.3 percent of Freddie Mac's purchases and 29.5 percent of Fannie Mae's purchases financed properties in underserved neighborhoods, compared with 31.5 percent home purchase loans originated in the conventional conforming market (excluding B&C loans). Thus, Freddie Mac performed at 90 percent of the market level, while Fannie Mae performed at 94 percent of the market level—both results similar to those reported in Appendix B for underserved areas based on 1990 Census geography. The 2000-based results also show that Fannie Mae has improved its performance and matched the primary market in funding underserved areas during 2002. The share of Fannie Mae's purchases going to underserved areas increased from 25.7 in 1999 to 32.3 percent in 2002, which placed it at the market level of 32.3 percent. However, the 2000-based results show that, like Freddie Mac, Fannie Mae's longer-term performance (since 1996) as well as its recent average performance (1999 to 2001) has consistently been below market levels. But, it is encouraging that Fannie Mae significantly improved its performance relative to the market during the first two years of HUD's higher Housing Goal levels.

In evaluating the GSEs' past performance, it should be noted that while borrowers in underserved metropolitan areas tend to have much lower incomes than borrowers in other areas, this does not mean that GSE mortgage purchases in underserved areas must necessarily be mortgages on housing for lower income families. Between 1999 and 2001, housing for above median-income households accounted for nearly 60 percent of the single-family owner-occupied mortgages the GSEs purchased in underserved areas.

Beneath the 2001–03 baseline figures in Table 4 are two additional rows of figures designated "2005 Assumptions." These figures show the effects of applying 2000 Census data and the new

specification of Metropolitan Statistical Areas released by the Office of Management and Budget in 2003 to the identification of underserved areas for purposes of measuring historical GSE goal performance. The second of the two lines also incorporates the effects of the Department's proposed change from counties to census tracts as the basis for identifying underserved areas outside of metropolitan areas beginning in 2005.

HUD's determination of underserved areas for purposes of computing the GSEs' performance on the Underserved Areas Housing Goal has through 2002 been based on area median incomes and area minority percentages from the 1990 Census. HUD applied the existing numerical thresholds for minority percentages and median incomes to 2000 Census data and ascertained that the proportion of underserved census tracts and the proportion of housing units in underserved census tracts in metropolitan areas increases significantly from 1990 levels: from 47.5 percent to 54.9 percent of census tracts underserved and from 44.3 percent to 52.5 percent of population in underserved census tracts (including the effects of the 2003 re-specification of Metropolitan Statistical Areas). Comparable shifts at the county level in non-metropolitan areas were found to be of much smaller magnitude. Further, HUD estimated the spatial distribution of GSE mortgage purchases across metropolitan census tracts and nonmetropolitan counties for recent years. The findings were that for 2000, 2001, and 2002, Fannie Mae's performance figures are an estimated 7.2 percent, 6.0 percent, and 5.5 percent higher in terms of 2000 Census geography than with 1990 Census geography. The corresponding figures for Freddie Mac are 5.6 percent, 5.1 percent, and 5.1 percent larger, respectively. With a further shift to tract-based definitions the figures for Fannie Mae are reduced by 0.7 percentage points in each of the three years, and for Freddie Mac 0.7, 0.8, and 0.7 percentage points, respectively. HUD has taken account of these shifts in establishing the level of the Underserved Areas Housing Goal for 2005 and beyond.

HUD originally adopted its current county-based definition for targeting GSE purchases to underserved non-metropolitan areas primarily based on information that rural lenders did not perceive their market areas in terms of census tracts, but rather, in terms of counties. A further concern was an apparent lack of reliability of geocoding software applied to non-metropolitan areas. Recent research summarized in Appendix B indicates that a tract-based

system would improve the extent to which the underserved area definition distinguishes areas by key socioeconomic and demographic characteristics such as median family income, poverty, unemployment, school dropout rates, and minority populations. Under a tract-based definition underserved areas stand out more as areas of lower income and low economic activity and as having somewhat larger minority population proportions. A tract-based definition would also improve the targeting of the goal to areas with relatively greater housing needs. Based on these findings, which are detailed in Appendix B, HUD is proposing to re-specify the definition of underserved areas within nonmetropolitan (rural) areas to be based on census tracts rather than counties.

c. Proposed Underserved Areas Home Purchase Subgoal for 2005–2008

The Department believes the GSEs can play a leadership role in underserved markets. To facilitate this leadership, the Department is proposing a Subgoal of 33 percent for each GSE's acquisitions of home purchase mortgages on properties located in the underserved census tracts of metropolitan areas for 2005, rising to 34 percent in 2006 and 35 percent in 2007 and 2008. The purpose of this Subgoal is to encourage the GSEs to improve their purchases of mortgages for homeownership in underserved areas. thus providing additional credit and capital for neighborhoods that historically have not been adequately served by the mortgage industry. If the GSEs meet this Subgoal, they will be leading the primary market, based on the census tract characteristics of home purchase loans reported in HMDA. Between 1999 and 2002, HMDA data show that underserved areas accounted for 32.3 percent of single-family-owner loans originated in the conventional conforming market of metropolitan areas. To reach the 33 percent Subgoal for 2005, both GSEs would have to improve their performance, as shown in Table 2—Fannie Mae by 1.9 percentage points over its average performance of 31.1 percent, and Freddie Mac by 3.5 percentage points over its average performance of 29.5 percent during 2001 and 2002. These required improvements would increase further by one percentage point in 2006 and by an additional one percentage point in 2007-08 under HUD's proposal. The Subgoal applies only to the GSEs' purchases in metropolitan areas because the HMDA-based market benchmark is only available for metropolitan areas.

Section II.B.2 of this preamble and Section I of Appendix B discuss the reasons why the Department is establishing a Subgoal for home purchase mortgages in underserved areas namely: (1) The GSEs' have the resources and the ability to lead the market in providing funding in underserved neighborhoods; (2) the GSEs have not led the market, even though they have the ability to do so; (3) troublesome disparities in our housing and mortgage markets indicate a continuing need for increased GSE activity; and (4) there are ample opportunities for the GSEs to improve their underserved area performance in the home purchase market. Although single-family-owner mortgages comprise the "bread and butter" of the GSEs business, the GSEs have lagged behind the primary market in financing properties in underserved areas. For the foregoing reasons, the Secretary believes that the GSEs can do more to raise the share of their home loan purchases in underserved areas. This can be accomplished by building on efforts that the enterprises have already started, including their new affordable lending products, their many partnership efforts, their outreach to inner city neighborhoods, their incorporation of greater flexibility into their underwriting guidelines, and their purchases of seasoned CRA loans. A wide variety of quantitative and qualitative indicators demonstrate that the GSEs have the resources and financial strength to improve their affordable lending performance enough to lead the market in underserved areas.

d. Proposed Goal Levels for 2005-2008

The Department is proposing to increase the Underserved Areas Housing Goal to 38 percent for 2005, 39 percent for 2006 and 2007, and 40 percent for 2008. The reasons for increasing the Underserved Areas Housing Goal are discussed in Sections I.C and II.A of this preamble. While the GSEs have lagged the primary market in funding loans in underserved areas, they appear to have ample room to improve their performance in that market. The GSEs' mortgage purchases between 1999 and 2002 accounted for 49 percent of the total (single-family and multifamily) conforming mortgage market, but they accounted for only 41 percent of the underserved areas market. A wide variety of quantitative and qualitative indicators demonstrate that the GSEs have the expertise, resources and financial strength to improve their performance in underserved areas and to close their gap with the market.

4. Special Affordable Housing Goal, §81.14

This section discusses the Department's consideration of the statutory factors in arriving at the proposed Housing Goal level for the Special Affordable Housing Goal, which counts mortgages on housing for very low-income families and low-income families living in low-income areas.

After analyzing the statutory factors, this proposed rule would establish: (a) A Goal of 22 percent for the percentage of the total number of dwelling units financed by each GSE's mortgage purchases that are for special affordable housing, affordable to very low-income families and families living in lowincome areas for 2005, rising to 24 percent in 2006, 26 percent in 2007, and 28 percent in 2008; (b) a Subgoal of 1 percent of each GSE's combined annual average mortgage purchases in 2000, 2001, and 2002, for each GSE's special affordable mortgage purchases that are for multifamily housing in 2005-2008; and (c) a Subgoal of 17 percent of the total number of each GSE's purchases of home purchase mortgages in metropolitan areas that are for housing affordable to very low income families and low-income families in low-income areas for 2005, rising to 18 percent in 2006, 19 percent in 2007, and 19 percent in 2008.

A short discussion of the statutory factors for establishing the Goal follows. Additional information analyzing each of the statutory factors is provided in Appendix C, "Departmental Considerations to Establish the Special Affordable Housing Goal," and Appendix D, "Estimating the Size of the Conventional Conforming Market for Each Housing Goal."

a. Market Estimate for the Special Affordable Housing Goal

The Department estimates that dwelling units serving very low-income families and low-income families living in low-income areas will account for 24–28 percent of total units financed in the overall conventional conforming mortgage market during the period 2005 through 2008. HUD has developed this range, rather than a point estimate, to account for the projected effects of different economic conditions that can reasonably be anticipated. HUD also estimates that the special affordable market averaged 28 percent between 1999 and 2002.

b. Past Performance of the GSEs Under the Special Affordable Housing Goal

As discussed above, a number of changes in Goal-counting procedures

were adopted as part of HUD's Housing Goals 2000 final rule. Thus, it is necessary to provide information using

several different measures in order to track changes in performance on the Special Affordable Housing Goal over the 1996–2002 period. These are shown in Table 5. BILLING CODE 4210–27–P

Table 5

GSE Performance on the Special Affordable Housing Goal and Multifamily Subgoals, 1996-2002, and Proposed Goals for 2005-08

									2005-08 Pro	2005-08 Proposed Goals	
	1996	1997	1998	1999	2000	2001*	2002*	2005	2006	2007	2008
Goal Levels: Actual	12%	14%	14%	14%	14%	20%	20%				
Proposed								22%	24%	76%	28%
Fannie Mae Goal Performance											
Official	15.4%	17.0%	14.3%	17.6%	19.2%	21.6%	21.4%				
2001-03 Baseline**	16.7%	19.3%	16.3%	18.5%	21 4%	20.2%	19.9%				
With 2005 Assumptions***				18.6%	21.7%	20.1%	19.4%				
Freddie Mac Goal Performance											
Official	14.0%	15.2%	15 9%	17.2%	20 7%	22.6%	21.4%				
2001-03 Baseline**	14.0%	15.2%	16 0%	17.4%	21 0%	19.3%	18.6%				
With 2005 Assumptions***				17.4%	20.8%	19.1%	17.8%				
Multifamily Subgoals (\$ billions):											
Fannie Mae Subgoal	\$1.29	\$1.29	\$1.29	\$1.29	\$1.29	\$2.85	\$2.85	\$5.49	\$5.49	\$5.49	\$5.49
Fannie Mae Performance	\$2.37	\$3.19	\$3.53	2.02	\$3.79	\$7.36	\$7.57				
Ratio, Performance/Subgoal	1.84	2.47	2.74	3.13	2.94	2.58	2.66				
Freddie Mac Subgoal	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$2.11	\$2.11	\$3.92	\$3.92	\$3.92	\$3.92
Freddie Mac Performance	\$1.06	\$1.21	\$2.69	\$2.26	\$2.40	\$4.65	\$5.22				
Ratio, Performance/Subgoal	1.07	1.22	2.72	2.28	2.42	2.20	2.47				

counting rules for 2001-03 differ from those that were in effect for 1996-2000, as discussed in the text. Goal performance is based on official HUD results. * Goal level and official performance in 2001-03 are not directly comparable with goal level and performance in 1996-2000, because the goal performance Multifamily subgoal figures for 2001-03 are comparable with figures for 1996-2000. ** "2001-03 Baseline" represents performance under current scoring rules (which exclude bonus points and Freddie Mac temporary adjustment factor), with 1990 census data used to determine low-income areas; no use of 2000 census data in estimating area median incomes; census tract boundaries as of the 1990 census and metropolitan area boundaries prior to their re-specification by the Office of Management and Budget in June, 2003.

*** "2005 Assumptions" represents performance under current scoring rules (which are proposed to continue for 2005-2008) with 2000 census data used to determine low-income areas and in estimating area median incomes; census tract boundaries as of the 2000 census; and the Office of Management and Budget's specification of metropolitan area boundaries as of June, 2003.

Based on the counting rules in effect at that time, as shown under "official performance" for 1996-2000 in Table 5, Special Affordable Housing Goal performance for Fannie Mae generally fluctuated in the range between 14 and 17 percent over the 1996–99 period, before rising to a peak of 19.2 percent in 2000. Freddie Mac's performance started at a lower level, but then increased in several steps, from 14-16 percent in 1996–98 to 17.2 percent in 1999, and to a record level of 20.7 percent in 2000. That was the only year prior to 2001 in which Freddie Mac's performance exceeded Fannie Mae's performance on this Goal.

Based on current counting rules, as shown under "official performance" for 2001 in Table 5, Special Affordable Housing Goal performance in 2001 was 21.6 percent for Fannie Mae and 22.6 percent for Freddie Mac. Special Affordable Housing Goal performance in 2002 was 21.4 percent for Fannie Mae and 21.4 percent for Freddie Mac.

Immediately beneath the official Special Affordable Housing Goal performance percentages in Table 5 are figures showing the GSEs' special affordable purchase percentages on a consistent basis for the entire 1996-2002 period. The assumptions used were the scoring rules established in HUD's Housing Goals 2000 Final Rule except that bonus points and the Freddie Mac Temporary Adjustment Factor (which were terminated at the end of 2003) are not applied. These are termed the "2001-03 baseline" assumptions. In terms of this measure, both Fannie Mae and Freddie Mac's special affordable performance reached its maximum in 2000 (Fannie Mae at 21.4 percent and Freddie Mac at 21.0 percent) before declining somewhat in 2001 and then declining further in 2002. Both GSEs' baseline performance in 2002 exceeded the level attained in 1999.

Overall, both GSEs' performance exceeded HUD's Special Affordable Housing Goals by significant margins in 1996–99, and by wide margins in 2000. New, higher Goals were established for 2001–03, and despite somewhat lower performance than the level attained in 2000 (largely due to the 2001–02 refinance wave, as discussed under the Low- and Moderate-Income Housing Goal), both GSEs' performance exceeded the new Goal levels in 2001–02.

The Special Affordable Housing Goal is designed, in part, to ensure that the GSEs maintain a consistent focus on serving the low- and very low-income portion of the housing market where housing needs are greatest. Appendices A and B use HMDA data and GSE loan-

level data for home purchase mortgages on single-family owner-occupied properties in metropolitan areas to compare the GSEs' performance in special affordable lending to the performance of depositories and other lenders in the conventional conforming market. There are two main findings with respect to the special affordable category. First, Fannie Mae and Freddie Mac have historically lagged depositories and the overall market in providing mortgage funds for special affordable housing. Between 1993 and 2002, 11.8 percent of Freddie Mac's mortgage purchases, 12.7 percent of Fannie Mae's purchases, 15.4 percent of loans originated by depositories, and 15.4 percent of loans originated in the conventional conforming market (without estimated B&C loans) were for special affordable housing

Second, while both GSEs have improved their performance over the past few years, Fannie Mae has made more progress than Freddie Mac in closing its gap with the market. The share of Fannie Mae's purchases going to special affordable loans increased from 12.5 percent in 1999 to 16.3 percent in 2002, the latter figure being at the 2002 market level of 16.3 percent. The share of Freddie Mac's purchases going to special affordable loans increased from 12.8 percent in 1999 to 15.8 percent in 2002, the latter figure being below the 2002 market level of

16.3 percent. Section G in Appendix A discusses the role of the GSEs both in the overall special affordable market and in the different segments (single-family owner, single-family rental, and multifamily rental) of the special affordable market. The GSEs' special affordable purchases accounted for 35 percent of all special affordable owner and rental units that were financed in the conventional conforming market between 1999 and 2002. The GSEs' 35-percent share of the special affordable market was below their 49-percent share of the overall market. Even in the owner market, where the GSEs account for 57 percent of the market, their share of the special affordable market was only 49 percent. While the GSEs improved their market shares during 2002, the analysis suggests that the GSEs are not leading the single-family market in purchasing loans that qualify for the Special Affordable Housing Goal. There is room and ample opportunity for the GSEs to improve their performance in purchasing affordable loans at the

The multifamily market is especially important in the establishment of the Special Affordable Housing Goal for

lower-income end of the market.

Fannie Mae and Freddie Mac because of the relatively high percentage of multifamily units meeting the Special Affordable Housing Goal. For example, between 1999 and 2002, 53 percent of units financed by Fannie Mae's multifamily mortgage purchases met the Special Affordable Housing Goal, representing 27 percent of units counted toward the Special Affordable Housing Goal, during a period when multifamily units represented only 10 percent of its total purchase volume. For Freddie Mac, 49 percent of units financed by multifamily mortgage purchases met the Special Affordable Housing Goal, representing 23 percent of units counted toward the Special Affordable Housing Goal, during a period when multifamily units represented only 9 percent of its total purchase volume.

c. Proposed Special Affordable Home Purchase Subgoal for 2005–2008

The Secretary believes the GSEs can play a leadership role in the special affordable market generally and the home purchase special affordable market in particular. Thus, the Department is proposing a Subgoal of 17 percent for each GSE's purchases of home purchase mortgages for special affordable housing located in metropolitan areas for 2005, rising to 18 percent in 2006, and 19 percent in 2007 and 2008. The purpose of this Subgoal is to encourage the GSEs to improve their purchases of home purchase mortgages on special affordable housing, thus expanding homeownership opportunities for very-low-income borrowers and low-income borrowers in low-income areas, including minority first-time homebuyers who are expected to enter the housing market over the next few years. If the GSEs meet this Subgoal, they will be leading the primary market, based on the income characteristics of home purchase loans reported in HMDA. Between 1999 and 2002, HMDA data show that special affordable housing accounted for an average of 16.4 percent of single-familyowner home purchase loans originated in the conventional conforming market in metropolitan areas. Loans in the B&C portion of the subprime market are not included in these averages. To reach the 17 percent Subgoal, both GSEs would have to improve their performance in 2005, as shown in Table 2—Fannie Mae by 1.4 percentage points over its average performance of 15.6 percent during 2001 and 2002, and Freddie Mac by 1.9 percentage points over its performance of 15.1 percent during the same period. These required improvements would increase further by one percentage point in 2006 and by an additional one

percentage point in 2007–08 under HUD's proposal. As discussed previously, the Subgoal applies only to the GSEs' purchases in metropolitan areas because the HMDA-based market benchmark is only available for metropolitan areas.

Section II.B.2 of this preamble and Section D of Appendix C discuss reasons why the Department set the Subgoal for special affordable loans.

d. Special Affordable Housing Goal: Multifamily Subgoals

Based on the GSEs' past performance on the Special Affordable Multifamily Subgoals, and on the outlook for the multifamily mortgage market, HUD is proposing that these Subgoals be retained for the 2005–2008 period. Unlike the overall Goals, which are expressed in terms of minimum Goalqualifying percentages of total units financed, these Subgoals for 2001–03 and in prior years have been expressed in terms of minimum dollar volumes of Goal-qualifying multifamily mortgage purchases. Specifically, each GSE's special affordable multifamily Subgoal is currently equal to 1.0 percent of its average total (single-family plus multifamily) mortgage volume over the 1997-99 period. Under this formulation, in October 2000 the Subgoals were set at \$2.85 billion per year for Fannie Mae and \$2.11 billion per year for Freddie Mac, in each of calendar years 2001 through 2003. These Subgoals are also in effect for 2004. These represented increases from the Goals for 1996–2000, which were \$1.29 billion annually for Fannie Mae and \$0.99 billion annually for Freddie Mac.

HUD's Determination. The multifamily mortgage market and both GSEs' multifamily transactions volume grew significantly over the 1993–2002 period, indicating that both enterprises have provided increasing support for the multifamily market, and that they have the ability to continue to provide further support for the market.

Specifically, Fannie Mae's total eligible multifamily mortgage purchase volume increased from \$4.6 billion in 1993 to \$12.5 billion in 1998, and then jumped sharply to \$18.7 billion in 2001 and \$18.3 billion in 2002. Its special affordable multifamily mortgage purchases followed a similar path, rising from \$1.7 billion in 1993 to \$3.5 billion in 1998 and \$4.0 billion in 1999, and also jumping sharply to \$7.4 billion in 2001 and \$7.6 billion in 2002. As a result of its strong performance, Fannie Mae's purchases have been at least twice its minimum subgoal in every year since 1997—247 percent of the Subgoal in that year, 274 percent in

1998, 313 percent in 1999, 294 percent in 2000, and, under the new Subgoal level, 258 percent in 2001, and 266 percent in 2002.

Freddie Mac's total eligible multifamily mortgage purchase volume increased even more sharply, from \$0.2 billion in 1993 to \$6.6 billion in 1998, and then jumped further in 2001 to \$11.8 billion and \$18.3 billion in 2002. Its special affordable multifamily mortgage purchases followed a similar path, rising from \$0.1 billion in 1993 to \$2.7 billion in 1998, and also jumping sharply to \$4.6 billion in 2001 and \$5.2 billion in 2002. As a result of its strong performance, Freddie Mac's purchases have also been at least twice its minimum Subgoal in every year since 1998—272 percent of the Subgoal in that year, 229 percent in 1999, 243 percent in 2000, and, under the new Subgoal level, 220 percent in 2001, and 247 percent in 2002.

The Special Affordable Multifamily Subgoals set forth in this proposed rule are reasonable and appropriate based on the Department's analysis of this market. The Department's decision to retain these Subgoals is based on HUD's analysis which indicates that multifamily housing still serves the housing needs of lower-income families and families in low-income areas to a greater extent than single-family housing. By retaining the Special Affordable Multifamily Subgoal, the Department ensures that the GSEs continue their activity in this market, and that they achieve at least a minimum level of special affordable multifamily mortgage purchases that are affordable to lower-income families. The Department proposes to retain each GSE's Special Affordable Multifamily Subgoal at 1.0 percent of its average annual dollar volume of total (singlefamily and multifamily) mortgage purchases over the 2000-2002 period. In dollar terms, the Department's proposal is \$5.49 billion per year in special affordable multifamily mortgage purchases for Fannie Mae, and \$3.92 billion per year in special affordable multifamily mortgage purchases for Freddie Mac. These Subgoals would be less than actual special affordable multifamily mortgage purchase volume in 2001 and 2002 for both GSEs. Thus, the Department believes that they would be feasible for the 2005–2008 period.

e. Proposed Special Affordable Housing Goal Levels for 2005–2008

The Department is proposing to increase the Special Affordable Housing Goal to 22 percent for 2005, 24 percent for 2006, 26 percent for 2007, and 28 percent for 2008. The reasons for

increasing the Special Affordable Housing Goal are discussed above in this preamble. Since the GSEs have historically lagged the primary market in funding special affordable loans, they have ample room to improve their performance in that market. The GSEs' mortgage purchases between 1999 and 2002 accounted for 49 percent of the total (single-family and multifamily) conforming mortgage market, but they accounted for only 35 percent of the special affordable market. A wide variety of quantitative and qualitative indicators demonstrate that the GSEs have the expertise, resources and financial strength to improve their special affordable lending performance and close their gap with the market.

C. Subpart I—Other Provisions

Section 81.102—Independent verification authority.

See Section II of this preamble for a complete discussion of the Department's proposal to amend § 81.102 to provide additional means of verifying and enforcing GSE data submissions.

IV. Findings and Certifications

Executive Order 12866

The Office of Management and Budget (OMB) reviewed this proposed rule under Executive Order 12866, Regulatory Planning and Review, which the President issued on September 30, 1993. This rule was determined to be economically significant under E.O. 12866. Any changes made to this proposed rule subsequent to its submission to OMB are identified in the docket file, which is available for public inspection between 8 a.m. and 5 p.m. weekdays in the Office of the Rules Docket Clerk, Office of General Counsel, Room 10276, Department of Housing and Urban Development, 451 Seventh Street, SW., Washington, DC. The Economic Analysis prepared for this rule is also available for public inspection in the Office of the Rules Docket Clerk and on HUD's Web site at http://www.hud.gov.

Congressional Review of Major Proposed Rules

This rule is a "major rule" as defined in Chapter 8 of 5 U.S.C. At the final rule stage, the rule will be submitted for Congressional review in accordance with this chapter.

Paperwork Reduction Act

HUD's collection of information on the GSEs' activities has been reviewed and authorized by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520), as implemented by OMB in regulations at 5 CFR part 1320. The OMB control number is 2502–0514.

Environmental Impact

This proposed rule would not direct, provide for assistance or loan and mortgage insurance for, or otherwise govern or regulate real property acquisition, disposition, lease, rehabilitation, alteration, demolition, or new construction; nor would it establish, revise, or provide for standards for construction or construction materials, manufactured housing, or occupancy. Accordingly, under 24 CFR 50.19(c)(1) of HUD's regulations, this proposed rule is categorically excluded from environmental review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321).

Regulatory Flexibility Act

The Secretary, in accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), has reviewed this rule before publication and by approving it certifies that this rule would not have a significant economic impact on a substantial number of small entities. This rule is applicable only to the GSEs, which are not small entities for purposes of the Regulatory Flexibility Act. Therefore, the rule does not have a significant economic impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act.

Executive Order 13132, Federalism

Executive Order 13132 ("Federalism") prohibits, to the extent practicable and permitted by law, an agency from promulgating a regulation that has federalism implications and either imposes substantial direct compliance costs on state and local governments and is not required by statute, or preempts state law, unless the relevant requirements of section 6 of the executive order are met. This proposed rule does not have federalism implications and does not impose substantial direct compliance costs on state and local governments or preempt state law within the meaning of the executive order.

Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (12 U.S.C. 1531— 1538) (UMRA) establishes requirements for federal agencies to assess the effects of their regulatory actions on state, local, and tribal governments, and the private sector. This proposed rule would not impose any federal mandates on any state, local, or tribal government, or on the private sector, within the meaning of UMRA.

List of Subjects in 24 CFR Part 81

Accounting, Federal Reserve System, Mortgages, Reporting and recordkeeping requirements, Securities.

For the reasons discussed in the preamble, HUD proposes to amend 24 CFR part 81 as follows:

PART 81—THE SECRETARY OF HUD'S REGULATION OF THE FEDERAL NATIONAL MORTGAGE ASSOCIATION (FANNIE MAE) AND THE FEDERAL HOME LOAN MORTGAGE CORPORATION (FREDDIE MAC)

1. The authority citation for 24 CFR part 81 continues to read as follows:

Authority: 12 U.S.C. 1451 *et seq.*, 1716–1723h, and 4501–4641; 42 U.S.C. 3535(d) and 3601–3619.

2. In § 81.2, revise the definitions of "Metropolitan area," "Minority," and paragraph (2) of the definition of "Underserved area," and add a new definition of the term "Home Purchase Mortgage," in alphabetical order, to read as follows:

§81.2 Definitions.

* * * * *

Home Purchase Mortgage means a residential mortgage for the purchase of an owner-occupied single-family property.

Metropolitan area means a metropolitan statistical area ("MSA"), or a portion of such an area for which median family income estimates are published annually by HUD.

Minority means any individual who is included within any one or more of the following racial and ethnic categories:

- (1) American Indian or Alaskan Native—a person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment;
- (2) Asian—a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam;
- (3) Black or African American—a person having origins in any of the black racial groups of Africa;
- (4) Hispanic or Latino—a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race; and
- (5) Native Hawaiian or Other Pacific Islander—a person having origins in any

of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

Underserved area means * * *

(2) For purposes of the definition of "Rural area," a whole census tract, a Federal or State American Indian reservation or tribal or individual trust land, or the balance of a census tract excluding the area within any Federal or State American Indian reservation or tribal or individual trust land, having:

(i) A median income at or below 120 percent of the greater of the State non-metropolitan median income or the nationwide non-metropolitan median income and a minority population of 30

percent or greater; or

(ii) A median income at or below 95 percent of the greater of the State non-metropolitan median income or nationwide non-metropolitan median income.

* * * * *

3. In § 81.12, revise the last sentence of paragraph (b) and revise paragraph (c), to read as follows:

§ 81.12 Low- and Moderate-Income Housing Goal.

- (b) Factors. * * * A statement documenting HUD's considerations and findings with respect to these factors, entitled "Departmental Considerations to Establish the Low- and Moderate-Income Housing Goal," was published in the **Federal Register** on date of publication of final rule in the **Federal Register**].
- (c) Goals. The annual goals for each GSE's purchases of mortgages on housing for low- and moderate-income families are:
- (1) For the year 2005, 52 percent of the total number of dwelling units financed by that GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Low- and Moderate-Income Housing Home Purchase Subgoal, 45 percent of the total number of home purchase mortgages in metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Low- and Moderate-Income Housing Goal in the year 2005 unless otherwise adjusted by HUD in accordance with FHEFSSA;
- (2) For the year 2006, 53 percent of the total number of dwelling units financed by that GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Low- and Moderate-Income Housing Home Purchase Subgoal, 46 percent of the total number of home purchase mortgages in

metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Low- and Moderate-Income Housing Goal in the year 2006 unless otherwise adjusted by HUD in accordance with FHEFSSA;

(3) For the year 2007, 55 percent of the total number of dwelling units financed by that GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Low- and Moderate-Income Housing Home Purchase Subgoal, 47 percent of the total number of home purchase mortgages in metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Low- and Moderate-Income Housing Goal in the year 2007 unless otherwise adjusted by HUD in accordance with FHEFSSA:

(4) For the year 2008, 57 percent of the total number of dwelling units financed by that GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Low- and Moderate-Income Housing Home Purchase Subgoal, 47 percent of the total number of home purchase mortgages in metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Low- and Moderate-Income Housing Goal in the year 2008 unless otherwise adjusted by HUD in accordance with FHEFSSA; and

(5) For the year 2009 and thereafter HUD shall establish annual goals. Pending establishment of goals for the year 2009 and thereafter, the annual goal for each of those years shall be 57 percent of the total number of dwelling units financed by that GSE's mortgage purchases in each of those years. In addition, as a Low and Moderate Income Housing Home Purchase Subgoal, 47 percent of the total number of home purchase mortgages in metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Low- and Moderate-Income Housing Goal in each of those years unless otherwise adjusted by HUD in accordance with FHEFSSA.

4. In § 81.13, revise the last sentence of paragraph (b) and revise paragraph (c), to read as follows:

§81.13 Central Cities, Rural Areas, and Other Underserved Areas Housing Goal.

(b) Factors. * * * A statement documenting HUD's considerations and findings with respect to these factors, entitled "Departmental Considerations to Establish the Central Cities, Rural Areas, and Other Underserved Areas Housing Goal," was published in the **Federal Register** on [date of publication of final rule in the **Federal Register**].

(c) Goals. The annual goals for each GSE's purchases of mortgages on housing located in central cities, rural areas, and other underserved areas are:

(1) For the year 2005, 38 percent of the total number of dwelling units financed by that GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Central Cities, Rural Areas, and Other Underserved Areas Home Purchase Subgoal, 33 percent of the total number of home purchase mortgages in metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Central Cities, Rural Areas, and Other Underserved Areas Housing Goal in the year 2005 unless otherwise adjusted by HUD in accordance with FHEFSSA;

(2) For the year 2006, 39 percent of the total number of dwelling units financed by that GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Central Cities, Rural Areas, and Other Underserved Areas Home Purchase Subgoal, 34 percent of the total number of home purchase mortgages in metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Central Cities, Rural Areas, and Other Underserved Areas Housing Goal in the year 2006 unless otherwise adjusted by HUD in accordance with FHEFSSA;

(3) For the year 2007, 39 percent of the total number of dwelling units financed by that GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Central Cities, Rural Areas, and Other Underserved Areas Home Purchase Subgoal, 35 percent of the total number of home purchase mortgages in metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Central Cities. Rural Areas, and Other Underserved Areas Housing Goal in the year 2007 unless otherwise adjusted by HUD in accordance with FHEFSSA;

(4) For the year 2008, 40 percent of the total number of dwelling units financed by that GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Central Cities, Rural Areas, and Other Underserved Areas Home Purchase Subgoal, 35 percent of the total number of home purchase mortgages in metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Central Cities, Rural Areas, and Other Underserved Areas Housing Goal in the year 2008 unless otherwise adjusted by HUD in accordance with FHEFSSA; and

(5) For the year 2009 and thereafter HUD shall establish annual goals. Pending establishment of goals for the year 2009 and thereafter, the annual goal for each of those years shall be 40 percent of the total number of dwelling units financed by that GSE's mortgage purchases in each of those years. In addition, as a Central Cities, Rural Areas, and Other Underserved Areas Home Purchase Subgoal, 35 percent of the total number of home purchase mortgages in metropolitan areas financed by that GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Central Cities, Rural Areas, and Other Underserved Areas Housing Goal in each of those years unless otherwise adjusted by HUD in accordance with FHEFSSA.

5. In § 81.14, revise the last sentence of paragraph (b) and revise paragraph (c), to read as follows:

§81.14 Special Affordable Housing Goal.

(b) * * * A statement documenting HUD's considerations and findings with respect to these factors, entitled "Departmental Considerations to Establish the Special Affordable Housing Goal," was published in the **Federal Register** on [date of publication of final rule in the **Federal Register**].

(c) Goals. The annual goals for each GSE's purchases of mortgages on rental and owner-occupied housing meeting the then-existing, unaddressed needs of and affordable to low-income families in low-income areas and very low-income families are:

(1) For the year 2005, 22 percent of the total number of dwelling units financed by each GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. The goal for the year 2005 shall include mortgage purchases financing dwelling units in multifamily housing totaling not less than 1.0 percent of the average annual dollar volume of combined (single family and multifamily) mortgages purchased by the respective GSE in 2000, 2001, and 2002, unless otherwise adjusted by HUD in

accordance with FHEFSSA. In addition, as a Special Affordable Housing Home Purchase Subgoal, 17 percent of the total number of home purchase mortgages in metropolitan areas financed by each GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Special Affordable Housing Goal in the year 2005 unless otherwise adjusted by HUD in accordance with FHEFSSA;

(2) For the year 2006, 24 percent of the total number of dwelling units financed by each GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. The goal for the year 2006 shall include mortgage purchases financing dwelling units in multifamily housing totaling not less than 1.0 percent of the average annual dollar volume of combined (single-family and multifamily) mortgages purchased by the respective GSE in 2000, 2001, and 2002, unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Special Affordable Housing Home Purchase Subgoal, 18 percent of the total number of home purchase mortgages in metropolitan areas financed by each GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Special Affordable Housing Goal in the year 2006 unless otherwise adjusted by HUD in accordance with FHEFSSA;

(3) For the year 2007, 26 percent of the total number of dwelling units financed by each GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. The goal for the year 2007 shall include mortgage purchases financing dwelling units in multifamily housing totaling not less than 1.0 percent of the average annual dollar volume of combined (single-family and multifamily) mortgages purchased by the respective GSE in 2000, 2001, and 2002, unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Special Affordable Housing Home Purchase Subgoal, 19 percent of the total number of home purchase mortgages in metropolitan areas financed by each GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Special Affordable Housing Goal in the year 2007 unless otherwise adjusted by HUD in accordance with FHEFSSA;

(4) For the year 2008, 28 percent of the total number of dwelling units financed by each GSE's mortgage purchases unless otherwise adjusted by HUD in accordance with FHEFSSA. The goal for the year 2008 shall include mortgage purchases financing dwelling units in multifamily housing totaling not less than 1.0 percent of the average annual dollar volume of combined (single-family and multifamily) mortgages purchased by the respective GSE in 2000, 2001, and 2002, unless otherwise adjusted by HUD in accordance with FHEFSSA. In addition, as a Special Affordable Housing Home Purchase Subgoal, 19 percent of the total number of home purchase mortgages in metropolitan areas financed by each GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Special Affordable Housing Goal in the year 2008 unless otherwise adjusted by HUD in accordance with FHEFSSA; and

(5) For the year 2009 and thereafter HUD shall establish annual goals. Pending establishment of goals for the year 2009 and thereafter, the annual goal for each of those years shall be 28 percent of the total number of dwelling units financed by each GSE's mortgage purchases in each of those years. The goal for each such year shall include mortgage purchases financing dwelling units in multifamily housing totaling not less than 1.0 percent of the annual average dollar volume of combined (single-family and multifamily) mortgages purchased by the respective GSE in the years 2000, 2001, and 2002. In addition, as a Special Affordable Housing Home Purchase Subgoal, 19 percent of the total number of home purchase mortgages in metropolitan areas financed by each GSE's mortgage purchases shall be home purchase mortgages in metropolitan areas which count toward the Special Affordable Housing Goal in each of those years unless otherwise adjusted by HUD in accordance with FHEFSSA.

6. Add §81.15(i), to read as follows:

§81.15 General requirements.

(i) Counting mortgages toward the Home Purchase Subgoals. (1) General. The requirements of this section, except for paragraphs (b) and (e) of this section, shall apply to counting mortgages toward the Home Purchase Subgoals at §§ 81.12–81.14. However, performance under the Subgoals shall be counted using a fraction that is converted into a percentage for each Subgoal and the numerator of the fraction for each Subgoal shall be the number of home purchase mortgages in metropolitan areas financed by each GSE's mortgage purchases in a particular year that count towards achievement of the applicable

housing goal. The denominator of each fraction shall be the total number of home purchase mortgages in metropolitan areas financed by each GSE's mortgage purchases in a particular year. For purposes of each Subgoal, the procedure for addressing missing data or information, as set forth in paragraph (d) of this section, shall be implemented using numbers of home purchase mortgages in metropolitan areas and not single-family owneroccupied dwelling units.

(2) Special counting rule for mortgages with more than one owneroccupied unit. For purposes of counting mortgages toward the Home Purchase Subgoals, where a single home purchase mortgage finances the purchase of two or more owner-occupied units in a metropolitan area, the mortgage shall count once toward each Subgoal that applies to the GSE's mortgage purchase.

7. Remove and reserve § 81.16(c)(1) and (c)(11)

8. Revise § 81.102 to read as follows:

§81.102 Verification and enforcement to ensure GSE data integrity.

(a) Independent verification authority. The Secretary may independently verify the accuracy and completeness of the data, information, and reports provided by each GSE, including conducting onsite verification, when such steps are reasonably related to determining whether a GSE is complying with 12 U.S.C. 4541'4589 and the GSE's Charter Act.

(b) Certification. The senior officer of each GSE who is responsible for submitting to HUD the AHAR under section 309(m) and (n) of the Fannie Mae Act or section 307(e) and (f) of the Freddie Mac Charter Act, as applicable, or for submitting to HUD such other report(s), data submission(s), or information for which certification is requested in writing by HUD ("GSE Certifying Official") shall certify in connection with each such report(s), data submission(s) or information that:

(1) The GSE Certifying Official has reviewed the particular AHAR, other report(s), data submission(s) or information:

(2) To the best of the GSE Certifying Official's knowledge and belief, the particular AHAR, other report(s), data submission(s) or information are current, complete and do not contain any untrue statement of a material fact;

(3) To the best of the GSE Certifying Official's knowledge and belief, the particular AHAR, other report(s), data submission(s) or information fairly present in all material respects the GSE's performance, as required to be reported by section 309(m) or (n) of the Fannie Mae Act or section 307(e) or (f) of the Freddie Mac Charter Act, or other applicable legal authority; and

(4) To the best of the GSE Certifying Official's knowledge and belief, the GSE has identified in writing any areas in which the GSE's particular AHAR, other report(s), data submission(s) or information may differ from HUD's written articulations of its counting rules including, but not limited to, the regulations under this part, and any other areas of ambiguity.

(c) Adjustment to correct current yearend errors, omissions or discrepancies. If HUD finds errors, omissions or discrepancies in a GSE's current yearend data submissions (including data reported in the GSE's AHAR under section 309(m) and (n) of the Fannie Mae Act or section 307(e) and (f) of the Freddie Mac Charter Act, as applicable) relative to HUD's regulations or other guidance, HUD will first notify the GSE by telephone or e-mail transmission of each such error, omission or discrepancy. The GSE must respond within five business days of such notification. If each error, omission or discrepancy is not resolved to HUD's satisfaction, HUD will then notify the GSE in writing and seek clarification or additional information to correct the error, omission or discrepancy. The GSE shall have 10 business days (or such longer period as HUD may establish, not to exceed 30 business days) from the date of this written notice to respond in writing to the request. If the GSE fails to submit a written response to HUD within this period, or if HUD determines that the GSE's written response fails to explain or correct each error, omission or discrepancy in its current year-end reported data to HUD's satisfaction, HUD will determine the appropriate adjustments to the numerator and the denominator of the applicable housing goal(s) and Subgoal(s). Should the Department determine that additional enforcement action against the GSE is warranted, it may pursue additional remedies under paragraph (e) of this section.

(d) Adjustment to correct prior year reporting errors, omissions or

discrepancies.

(1) General. HUD may, in accordance with its authority in 12 U.S.C. 4566(a) to measure the extent of compliance with the housing goals, adjust a GSE's current year-end performance under a housing goal to deduct credit under the current goals and/or Subgoals to the extent caused by errors, omissions or discrepancies in a GSE's prior year's data submissions (including the AHAR under section 309(m) and (n) of the Fannie Mae Act or section 307(e) and (f)

of the Freddie Mac Charter Act, as applicable) that result in an overstatement of GSE housing goal performance.

- (2) Applicability. This paragraph applies to errors, omissions or discrepancies in a GSE's data submissions, including its AHAR, as provided in this section. It does not apply to the process applicable to HUD's review of current year performance, as described in paragraph (c) of this section.
- (3) *Limitations*. This paragraph applies only to GSE reporting periods occurring on or after [effective date of final rule].
- (4) Procedural requirements. In the event HUD determines that an adjustment to correct an error, omission or discrepancy in a GSE's prior year's data submissions (including data reported in the AHAR), as provided in paragraph (d)(1) of this section is warranted, it will provide the GSE with an initial letter containing its written findings and determinations within 24 months of the end of the relevant GSE reporting year. The GSE shall have an opportunity, not to exceed 30 days from the date of HUD's initial letter, to respond in writing, with supporting documentation, to contest the initial determination that there were errors in a prior year's data submissions (including the AHAR). HUD shall then issue a final determination letter within 60 days of the date of the GSE's written response. HUD may, upon a determination of good cause, extend the period for issuing a final determination letter by an additional 30 days.
- (5) Adjustments. If the GSE failed to submit a written response to HUD's initial determination letter within the 30-day time period, or if, after reviewing a GSE's written response to the initial determination letter, HUD determines that a GSE's prior year's data submissions (including data reported in the AHAR as provided in paragraph (d)(1) of this section) resulted in an overstatement of its performance under one or more housing goals or Subgoals for a previous reporting period, HUD will direct the GSE to correct the overstatement by adjusting its level of performance under the applicable housing goal(s) and/or Subgoal(s) in the current year AHAR prior to submitting such report to HUD. The adjustment will be made by excluding the number of units or mortgages that HUD has determined were erroneously counted in a previous year from the numerator (but not the denominator) of each applicable housing goal and/or Subgoal. The GSE shall reflect the adjustment in

- its AHAR for the current year, as directed by HUD.
- (6) Effect of failure to meet a housing goal, or substantial probability of such failure.
- (i) Procedural requirements. In the event HUD determines that a GSE has failed, or that there is a substantial probability that the GSE will fail, to meet any housing goal(s) in the current reporting year as a result of an adjustment under paragraph (d) (5) of this section for previously overstated housing goals performance, HUD shall provide written notice to the GSE and otherwise comply with the procedural requirements set forth in 12 U.S.C. 4566(b).
- (ii) Remedies. If HUD determines pursuant to 12 U.S.C. 4566(b) that a GSE has failed, or that there is a substantial probability that the GSE will fail, any housing goal(s) in the current reporting year as a result of an adjustment under paragraph (d) (5) of this section to correct for an overstatement of a prior year's goals performance, and that the achievement of the housing goal was or is feasible, it may pursue one or both of the following remedies:

(A) *Housing plan*. HUD may require the GSE to submit a housing plan for approval by the Secretary pursuant to 12 U.S.C. 4566(c) and § 81.22; and

(B) Additional enforcement options. HUD may, after complying with the procedural requirements set forth in subpart G of this part, seek a cease-and-desist order or civil money penalties against the GSE as described in paragraph (e) of this section.

(e) Additional enforcement options. (1) General. In the event the Secretary determines, either as a result of its independent verification authority described in paragraph (a) of this section or by other means, that the data submissions, information or report(s) submitted by a GSE to HUD pursuant to subpart E of this part, section 309(m) or (n) of the Fannie Mae Charter Act, or section 307(e) and (f) of the Freddie Mac Charter Act, as applicable, are not current, are incomplete or otherwise contain an untrue statement of material fact, the Secretary may regard this as equivalent to the GSE's failing to submit such data and, accordingly, may take the enforcement action authorized under paragraph (e)(2) of this section.

(2) Remedies. After HUD makes a final determination pursuant to paragraph (e) of this section that a GSE has submitted report(s), data submission(s) or information that are not current, are incomplete, or that contain untrue statement(s) of material fact, it may pursue any or all of the

following remedies:

(i) HUD may obtain a cease-and-desist order against the GSE for failing to submit the report(s), data submission(s) or information, as applicable, required by subsection (m) or (n) of section 309 of the Fannie Mae Charter Act or subsection (e) or (f) of the Freddie Mac Charter Act, and as authorized by 12 U.S.C. 4581(a)(3), §81.82, and subpart E of this part;

(ii) HUD may seek civil money penalties against the GSE for failing to submit the report(s), data submissions, or information, as applicable, required by subsection (m) or (n) of section 309 of the Fannie Mae Charter Act or subsection (e) or (f) of the Freddie Mac Charter Act, and as authorized by 12 U.S.C. 4585(a)(3), 24 CFR 81.83 and Subpart E of this part.

(iii) HUD may seek any other remedies or penalties against the GSE that may be available to the Secretary by virtue of the GSE's failure to provide data submissions, information and/or report(s) in accordance with the requirements of this section.

(3) Procedures. HUD shall comply with the procedures set forth in Subpart G of this part in connection with any enforcement action that it initiates against a GSE under this paragraph.

Dated: April 2, 2004.

John C. Weicher,

Assistant Secretary for Housing—Federal Housing Commissioner.

Note: The following appendices will not appear in the Code of Federal Regulations.

Appendix A—Departmental Considerations To Establish the Lowand Moderate-Income Housing Goal

A. Introduction

Sections 1 and 2 provide a basic description of the rule process. Section 3 discusses conclusions based on consideration of the factors.

1. Establishment of Low- and Moderate-Income Goal

In establishing the Low- and Moderate-Income Housing Goals for the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac), collectively referred to as the Government-Sponsored Enterprises (GSEs), Section 1332 of the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (12 U.S.C. 4562) (FHEFSSA) requires the Secretary to consider:

- (1) National housing needs;
- (2) Economic, housing, and demographic conditions;
- (3) The performance and effort of the enterprises toward achieving the Low- and Moderate-Income Housing Goal in previous years;
- (4) The size of the conventional mortgage market serving low- and moderate-income

families relative to the size of the overall conventional mortgage market;

(5) The ability of the enterprises to lead the industry in making mortgage credit available for low- and moderate-income families; and

(6) The need to maintain the sound financial condition of the enterprises.

The Secretary also considered these factors in establishing a low- and moderate-income subgoal for home purchase loans on single-family-owner properties in metropolitan areas.

2. Underlying Data

In considering the statutory factors in establishing these goals, HUD relied on data from the 2001 American Housing Survey, the 2000 Censuses of Population and Housing, the 1991 Residential Finance Survey (RFS), the 1995 Property Owners and Managers Survey (POMS), other government reports, reports submitted in accordance with the Home Mortgage Disclosure Act (HMDA), and the GSEs. In order to measure performance toward achieving the Low- and Moderate-Income Housing Goal in previous years, HUD analyzed the loan-level data on all mortgages purchased by the GSEs for 1993-2002 in accordance with the goal counting provisions established by the Department in the December 1995 and October 2000 rules (24 CFR part 81).

3. Conclusions Based on Consideration of the Factors

The discussion of the first two factors covers a range of topics on housing needs and economic and demographic trends that are important for understanding mortgage markets. Information is provided which describes the market environment in which the GSEs must operate (for example, trends in refinancing activity). In addition, the severe housing problems faced by lowerincome families are discussed, as are the barriers that minorities face when attempting to become homeowners. This discussion serves to provide useful background information for the discussion of the Underserved Areas and Special Affordable Housing Goals in Appendixes B and C, as well as for the Low- and Moderate-Income Housing Goal in this Appendix.

The third factor (past performance) and the fifth factor (ability of the GSEs to lead the industry) are also discussed in some detail in this Appendix. With respect to home purchase mortgages, the past performance of the GSEs and their ability to lead the industry are examined for all three housing goals; that analysis provides the basis for establishing the three subgoals for the GSEs' acquisitions of home loans on single-family-owner properties.

The fourth factor (size of the market) and the sixth factor (need to maintain the GSEs' sound financial condition) are mentioned only briefly in this Appendix. Detailed analyses of the fourth factor and the sixth factor are contained in Appendix D and in the economic analysis of this rule, respectively.

The factors are discussed in sections B through H of this appendix. Section I summarizes the findings and presents the Department's conclusions concerning the

Low- and Moderate-Income Housing Goal. Section I also gives the rationale for a lowand moderate-income subgoal for home purchase loans.

The consideration of the factors in this Appendix has led the Secretary to the following conclusions:

- · Changing population demographics will result in a need for primary and secondary mortgage markets to meet nontraditional credit needs, respond to diverse housing preferences, and overcome information and other barriers that many immigrants and minorities face. Growing housing demand from immigrants (both those who are already here and those projected to come) and nontraditional homebuyers will help to offset declines in the demand for housing caused by the aging of the population. Immigrants and other minorities-who accounted for nearly 40 percent of the growth in the nation's homeownership rate over the past five years—will be responsible for almost two-thirds of the growth in the number of new households over the next ten years. As these demographic factors play out, the overall effect on housing demand will likely be sustained growth and an increasingly diverse household population from which to draw new renters and homeowners.
- Despite the record national homeownership rate of 67.9 percent in 2002, much lower rates prevailed for minorities, especially for African-American households (47.9 percent) and Hispanics (48.2 percent), and these lower rates are only partly accounted for by differences in income, age, and other socioeconomic factors.
- In addition to low incomes, barriers to homeownership that disproportionately affect minorities and immigrants include lack of capital for down payments and closing costs, poor credit history, lack of access to mainstream lenders, little understanding of the home buying process, and continued discrimination in housing markets and mortgage lending.
- Å HUD-published study of discrimination in the rental and owner markets found that while differential treatment between minority and white home seekers had declined over the past ten years, it continued at an unacceptable level in the year 2000. In addition, disparities in mortgage lending continued across the nation in 2002, when the loan denial rate was 7.8 percent for white mortgage applicants, but 20.1 percent for African Americans and 15.5 percent for Hispanics.1
- Americans with the lowest incomes face persistent housing problems. Recent HUD analysis reveals that in 2001, 5.1 million households had "worst case" housing needs, defined as housing costs greater than 50 percent of household income or severely inadequate housing among unassisted very-low-income renter households. Among these households, 90 percent had a severe rent burden, 6 percent lived in severely inadequate housing, and 4 percent suffered from both problems.

¹ Mortgage denial rates are based on 2002 HMDA data for home purchase loans; manufactured housing lenders are excluded from these comparisons.

- Over the past ten years, there has been a "revolution in affordable lending" that has extended homeownership opportunities to historically underserved households. Fannie Mae and Freddie Mac have been a substantial part of this "revolution in affordable lending." During the mid-to-late 1990s, they added flexibility to their underwriting guidelines, introduced new low-downpayment products, and worked to expand the use of automated underwriting in evaluating the creditworthiness of loan applicants HMDA data suggest that the industry and GSE initiatives are increasing the flow of credit to underserved borrowers. Between 1993 and 2002, conventional loans to lowincome and minority families increased at much faster rates than loans to upper-income and non-minority families.
- · The Low- and Moderate-Income Goal was set at 50 percent beginning in 2001. Effective on January 1, 2001, several changes in counting requirements came into effect, including (1) "bonus points" (double credit) for purchases of mortgages on small (5-50 unit) multifamily properties and, above a threshold level, mortgages on 2-4 unit owner-occupied properties; and (2) a "temporary adjustment factor" (1.35 unit credit) for Freddie Mac's purchases of mortgages on large (more than 50 units) multifamily properties. With these two counting rules, Fannie Mae's performance was 51.5 percent in 2001 and 51.8 percent in 2002, and Freddie Mac's performance was 53.2 percent in 2001 and 51.4 percent in 2002; thus, both GSEs surpassed this higher goal in both years.
- The bonuses and temporary adjustment factor expired at the end of 2003. Without these rules, Fannie Mae's performance would have been 51.3 percent in 2000, 49.2 percent in 2001, and 49.0 percent in 2002. Freddie Mac's performance would have been 50.6 percent in 2000, 47.7 percent in 2001, and 46.5 percent in 2002. Thus, both Fannie Mae and Freddie Mac would have surpassed the 50 percent goal in 2000 and fallen short in 2001 and 2002.
- This Appendix includes a comprehensive analysis of each GSE's performance in funding home purchase mortgages for borrowers and neighborhoods covered by the three housing goals-special affordable and low- and moderate-income borrowers and underserved areas. In addition, the role of the GSEs in the first-time homebuyer market is examined. While Freddie Mac has improved its affordable lending performance in recent years, it has consistently lagged the conventional conforming market in funding affordable home purchase loans for borrowers and neighborhoods targeted by the housing goals. However, Freddie Mac's recent performance (1999-2002) has been much closer to the market than its earlier performance
- In general, Fannie Mae's affordable lending performance has been better than Freddie Mac's. But like Freddie Mac, Fannie Mae's average performance during past periods (e.g., 1993–2002, 1996–2002, 1999–2002) has been below market levels. However, it is encouraging that Fannie Mae markedly improved its affordable lending performance relative to the market during

- 2001 and 2002, the first two years of HUD's higher housing goal levels. Fannie Mae's average performance during 2001 and 2002 approached the market on the special affordable and underserved areas categories and matched the market on the low-mod category. Under one measure of GSE and market activity, Fannie Mae matched the market during 2002 on the special affordable category and slightly outperformed the market on the low-mod and underserved areas categories. In this case, which is referred to in the text as the "purchase year" approach, Fannie Mae's performance is based on comparing its purchases of all loans (both seasoned loans and newly-originated mortgages) during a particular year with loans originated in the market in that year. When Fannie Mae's performance is measured on an "origination year" basis (that is, allocating Fannie Mae's purchases in a particular year to the year that the purchasedloan was originated), Fannie Mae matched the market in the low- and moderate-income category during 2002, and lagged the market slightly on the other two categories.
- Both Fannie Mae and Freddie lag the conventional conforming market in funding first-time homebuyers, and by a rather wide margin. Between 1999 and 2001, first-time homebuyers accounted for 27 percent of each GSE's purchases of home loans, compared with 38 percent for home loans originated in the conventional conforming market.
- The GSEs have accounted for a significant share of the total (government as well as conventional) market for home purchase loans, but their market share for each of the affordable lending categories (e.g., low-income borrowers and census tracts, high-minority census tracts) has been less than their share of the overall market.
- · The GSEs also account for a very small share of the market for important groups such as minority first-time homebuyers. Considering the total mortgage market (both government and conventional loans), it is estimated that the GSEs purchased only 14 percent of loans originated between 1999 and 2001 for African-American and Hispanic first-time homebuyers, or one-third of their share (42 percent) of all home purchase loans originated during that period. Considering the conventional conforming market and the same time period, it is estimated that the GSEs purchased only 31 percent of loans originated for African-American and Hispanic first-time homebuyers, or approximately one-half of their share (57 percent) of all home purchase loans in that market. The GSEs' small share of the first time homebuyer market could be due to the preponderance of high (over 20 percent) downpayment loans in their mortgage purchases
- This Appendix discusses the dynamic nature of the single-family mortgage market and the numerous changes that that this market has undergone over the past few years. Some important trends that will likely factor into the GSEs' performance in meeting the needs of underserved borrowers include the growth of the subprime market, the increasing use of automated underwriting systems, and the introduction of risk-based pricing into the market.

- The long run outlook for the multifamily rental market is sustained, moderate growth, based on favorable demographics. The minority population, especially Hispanics, provides a growing source of demand for affordable rental housing. "Lifestyle renters" (older, middle-income households) are also a fast-growing segment of the rental population. Provision of affordable housing, however, will continue to challenge suppliers of multifamily rental housing and policy makers at all levels of government. Low incomes combined with high housing costs define a difficult situation for millions of renter households. Housing cost reductions are constrained by high land prices and construction costs in many markets. Government action—through land use regulation, building codes, and occupancy standards—are major contributors to those high costs.
- The market for financing multifamily apartments has grown to record volumes. Fannie Mae and Freddie Mac have been among those boosting volumes and introducing new programs to serve the multifamily market. Fannie Mae's multifamily purchases jumped from about \$10 billion in 1999 and 2000 to \$18.7 billion during the heavy refinancing year of 2001, and \$18.3 billion in 2002.
- Freddie Mac has re-entered the multifamily market, after withdrawing for a time in the early 1990s. Concerns regarding Freddie Mac's multifamily capabilities no longer constrain its performance with regard to the housing goals. Freddie Mac's multifamily purchases increased from a relatively low \$3 billion in 1997 to approximately \$7 billion during the next three years (1998 to 2000), before rising further to \$11.9 billion in 2001 and \$13.3 billion in 2002.
- The overall presence of both GSEs in the rental mortgage market falls short of their involvement in the single-family owner market. Between 1999 and 2002, the GSEs' purchases totaled for 57 percent of the owner market, but only 27 percent of the single-family rental market and 30 percent of the multifamily market. Certainly there is room for expansion of the GSEs in supporting the nation's rental markets, and that expansion is needed if the GSEs are to make significant progress in closing the gaps between the affordability of their mortgage purchases and that of the overall conventional conforming market.
- Considering both owner and rental properties, the GSEs' presence in the goalsqualifying market has been significantly less than their presence in the overall conventional conforming mortgage market. Specifically, HUD estimates that the GSEs accounted for 49 percent of all owner and rental units financed in the primary market between 1999 and 2002, but only 32 percent of units qualifying for the low-mod goal, 41 percent of units qualifying for the underserved areas goal, and 35 percent of units qualifying for special affordable goal.

B. Factor 1: National Housing Needs

This section reviews the general housing needs of lower-income families that exist today and are expected to continue in the near future. Affordability problems that lower-income families face in both the rental and owner markets are examined. The section also describes racial disparities in homeownership and the causes of these disparities. It also notes some special problems, such as the need to rehabilitate our older urban housing stock, that are discussed throughout this appendix.

1. Homeownership Gaps

Despite recent record homeownership rates, many Americans, including disproportionate numbers of racial and ethnic minorities, are shut out of homeownership opportunities. Although the national homeownership rate for all Americans stood at 68.3 percent at the end of 2003, the rate for minority households was lower-for example, just 48.5 percent of African-American households and 48.3 percent of Hispanic households owned a home. Differences in income and age between minorities and whites do not fully explain these gaps. The Joint Center for Housing Studies estimated that if minorities owned homes at the same rates as whites of similar age and income, a homeownership gap of 10 percentage points would still exist.2

a. Importance of Homeownership

Homeownership is one of the most common forms of property ownership as well as savings.3 Historically, home equity has been the largest source of wealth for most Americans, and wealth gains in housing have been more widely distributed among the population than gains in the stock market.4 With stocks appreciating faster than home prices over the past decade, home equity as a share of family assets fell from 38 percent in 1989 to 33 percent in 1998.5 Many of the gains in the stock market were erased after 1999 however, and housing returned to its place as the most significant asset in the household balance sheet in 2001.6 Even with a bull market through most of the 1990s, 59 percent of all homeowners in 1998 held more than half of their net wealth in the form of home equity.7 Among low-income homeowners (household income less than \$20,000), home equity accounted for about 72 percent of household wealth, and approximately 55 percent for homeowners with incomes between \$20,000 and \$50,000. Median net wealth for low-income

homeowners under 65 was twelve times that of a similar renter.⁸ Thus a homeownership gap continues to translate directly into a wealth gap.

High rates of homeownership support economic stability within housing and related industries, sectors that contributed nearly one-half of the total gain in real GDP in 2001.9 In addition to economic benefits such as jobs and residential investment, studies show that the better living environment associated with owning a home has positive impacts on children, in terms of lower rates of teenage pregnancy and higher reading other test scores. The current literature substantiates that the benefits of homeownership extend beyond individual homeowners and their families to society at large. Homeownership promotes social and community stability by increasing the number of stakeholders and reducing disparities in the distributions of wealth and income. The empirical literature is generally supportive of a relationship between homeownership and greater investment in property.10 Homeownership is also associated with neighborhood stability (lower mobility), greater participation in voluntary and political activities,11 and links to entrepreneurship.12

b. Barriers to Homeownership 13

Insufficient income, high debt burdens, and limited savings are obstacles to homeownership for younger families. As home prices skyrocketed during the late 1970s and early 1980s, real incomes also stagnated, with earnings growth particularly slow for blue collar and less educated workers. Through most of the 1980s, the combination of slow income growth and increasing rents made saving for home purchase more difficult, and relatively high interest rates required large fractions of family income for home mortgage payments. Thus, during that period, fewer households had the financial resources to meet down payment requirements, closing costs, and monthly mortgage payments.

Economic expansion and lower mortgage rates substantially improved homeownership affordability during the 1990s. Many young, low-income, and minority families who were closed out of the housing market during the 1980s re-entered the housing market during the last decade. Even with an economic slowdown in 2000–2001, improvements in

affordability were seen in 2001 as lower interest rates and modest income growth reduced the average monthly mortgage payment from its year-ago level. 14 However, many households still lack the earning power to take advantage of today's home buying opportunities. Several trends have contributed to the reduction in the real earnings of young adults without college education over the last 15 years, including technological changes that favor white-collar employment, losses of unionized manufacturing jobs, and wage pressures exerted by globalization. Over 42 percent of the nation's population between the ages of 25 and 34 had no advanced education in 200015 and were therefore at risk of being unable to afford homeownership. African Americans and Hispanics, who have lower average levels of educational attainment than whites, are especially disadvantaged by the erosion in wages among less educated workers.

Immigrants and other minorities, who accounted for nearly 40 percent of the growth in the homeownership rate over the past five years, will be responsible for two-thirds of the growth in new households over the next ten years. These groups have unique housing needs and face numerous hurdles in becoming homeowners. In addition to low income, barriers to homeownership that disproportionately affect minorities and immigrants include:

- Lack of capital for down payment and closing costs:
 - Poor credit history;
 - · Lack of access to mainstream lenders;
- Complexity and fear of the home buying process; and,
- Continued discrimination in housing markets and mortgage lending.

(i) Lack of Cash for Down Payment. In the 2002 Fannie Mae National Housing Survey, 40 percent of Hispanics reported not having enough money for a down payment as an obstacle to buying a home versus 32 percent of all Americans. 16 A study by Gyourko, Linneman, and Wachter found significant racial differences in homeownership rates in "wealth-constrained" households while finding no racial differences in homeownership rates among households with wealth sufficient to meet down payment and closing costs.17 Minorities and immigrants are much less likely to receive gifts and inheritances from their parents to assist them in becoming a homeowner.

(ii) *Poor Credit History.* Poor credit history also differentially affects minority

² Joint Center for Housing Studies of Harvard University, *State of the Nation's Housing 2003*, 2003, p. 16.

³According to the National Association of Realtors, *Housing Market Will Change in New Millennium as Population Shifts*, November 7, 1998. Forty-five percent of U.S. household wealth was in the form of home equity in 1998. Since 1968, home prices have increased each year, on average, at the rate of inflation plus two percentage points

⁴Todd Buchholz, "Safe At Home: The New Role of Housing in the U.S. Economy," a paper commissioned by the Homeownership Alliance, 2002

⁵ Federal Reserve Board, "Recent Changes in U.S. Family Finances: Results from the 1998 Survey of Consumer Finances," January 2000, p. 15.

 $^{^6}$ Mark Zandi, ''Housing's Rising Contribution,'' June 2002, p. 5.

⁷Joint Center for Housing Studies of Harvard University, *State of the Nation's Housing 1998*.

⁸ U.S Department of Housing and Urban Development, "Economic Benefits of Increasing Minority Homeownership," p. 7.

 $^{^9\,}Mark$ Zandi, ''Housing's Rising Contribution,'' June 2002, p. 3.

¹⁰ Robert Dietz and Donald Haurin, "The Social and Private Consequences of Homeownership," May 2001, p. 51.

¹¹ William M. Rohe, George McCarthy, and Shannon Van Zandt, "The Social Benefits and Costs of Homeownership," May 2000, p. 31.

¹²U.S. Department of Housing and Urban Development, "Economic Benefits of Increasing Minority Homeownership," p. 8–9.

¹³ For a discussion of the causes of existing disparities in homeownership, see the various articles in Nicolas P. Retsinas and Eric S. Belsky (Eds), Low-Income Homeownership: Examining the Unexamined Goal, Washington, D.C.: Brookings Institution Press, 2002.

¹⁴ Joint Center for Housing Studies of Harvard University, *State of the Nation's Housing 2002*, p. 14.

¹⁵ U.S. Census Bureau, *Current Population Survey*, March 2000.

¹⁶ Fannie Mae, Fannie Mae National Housing Survey, 2002, p. 11.

¹⁷ Joseph Gyourko, Peter Linneman, and Susan Wachter. "Analyzing the Relationships among Race, Wealth, and Home Ownership in America," *Journal of Housing Economics* 8 (2), p. 63–89, as discussed in Thomas P. Boehm and Alan M. Schlottmann. "Housing and Wealth Accumulation: Intergenerational Impacts," in *Low-Income Homeownership: Examining the Unexamined Goal*, Brookings Institution Press (2002), p. 408.

households. In the same Fannie Mae survey, nearly a third of African-American respondents said their credit rating would be an obstacle to buying a home versus 23 percent of all Americans. 18 Because African-American and Hispanic borrowers are more likely than others to have little traditional credit history or a poorer credit history, they face increased difficulties in being accepted for mortgage credit. This is because credit history scores (such as a FICO score) are a major component of the new automated mortgage scoring systems. These systems are more likely to refer minority borrowers for more intensive manual underwriting, rather than to automatically accept them for the less costly, expedited processing. In these situations, there is the additional concern that "referred" borrowers may not always receive a manual underwriting for the loan that they initially applied for, but rather be directed to a high-cost subprime loan product.

(iii) Lack of Access to Mainstream Lenders. Minorities face heightened barriers in accessing credit because of their often limited access to mainstream lenders. Access to lenders becomes difficult when mainstream financial institutions are not located in neighborhoods where minorities live. The growth in subprime lending over the last several years has benefited credit-impaired borrowers—those who may have blemishes in their credit record, insufficient credit history, or non-traditional credit sources. Subprime lenders have allowed these borrowers to access credit that they could not otherwise obtain in the prime credit market. However, studies by HUD, The Woodstock Institute and others have shown that subprime lending is disproportionately concentrated in low-income and minority neighborhoods. 19 While these studies recognize that differences in credit behavior explain some of the disparities in subprime lending across neighborhoods, they argue that the absence of mainstream lenders has also contributed to the concentration of subprime lending in low-income and minority neighborhoods. More competition by prime lenders in inner city neighborhoods could lower the borrowing costs of families who currently have only the option of a highcost subprime loan. This issue of the lack of mainstream lenders in inner city neighborhoods is discussed further in subsection 2, below, in connection with disparities between neighborhoods.

(iv) Complexity and Fear of Home Buying Process. An additional barrier to

homeownership is fear and a lack of understanding about the buying process and the risks of ownership. Many Americans could become homeowners if provided with information to correct myths, misinformation, and concerns about the mortgage process. Some potential homeowners, particularly minorities, are unaware that they may already qualify for a mortgage they can afford. The 2002 Fannie Mae survey revealed that 30 percent of Americans believe erroneously that they need to pay 20 percent of the cost of a home up-front. In addition, Fannie Mae reported that half of Americans are only "somewhat" or "not at all" comfortable with mortgage terms.²⁰ Freddie Mac reports that six of 10 Hispanics are uncomfortable with home buying terminology, and think they need 'perfect credit' to buy; and less than four in 10 are aware that lenders are not required by law to give them the lowest interest rate possible.21 A study using focus groups with renters found that even among those whose financial status would make them capable of homeownership, many felt that the buying process was insurmountable because they feared rejection by the lender or being taken advantage of.22

(v) Discrimination in the Housing and Mortgage Markets. Finally, differential treatment of minorities in the sales and rental markets and in the mortgage lending market has been well documented. The continued discrimination in these markets is discussed in the next section.

2. Disparities in Housing and Mortgage Markets

Sales and Rental Markets, In 2002, HUD released its third Housing Discrimination Study (HDS) in the sale and rental of housing. The study, entitled Discrimination in Metropolitan Housing Markets: National Results from Phase I of The Housing Discrimination Study was conducted by the Urban Institute.²³ The results of this HDS were based on 4,600 paired tests of minority and non-minority home seekers conducted during 2000 in 23 metropolitan areas nationwide. The report showed large decreases between 1989 and 2000 in the level of discrimination experienced by Hispanics and African Americans seeking to buy a home. There has also been a modest decrease in discrimination toward African Americans seeking to rent a unit. This downward trend, however, has not been seen for Hispanic renters, who now are more likely to experience discrimination in their housing search than do African-American renters. But while generally down since 1989, the report found that housing discrimination still exists

at unacceptable levels. The greatest share of discrimination for Hispanic and African-American home seekers can still be attributed to being told units are unavailable when they are available to non-Hispanic whites, and being shown and told about fewer units than comparable non-minority home seekers. Although discrimination is down on most areas for African-American and Hispanic homebuyers, there remain worrisome upward trends of discrimination in the areas of geographic steering for African Americans and, relative to non-Hispanic whites, the amount of help agents provide to Hispanics with obtaining financing. On the rental side, Hispanics are more likely in 2000 than in 1989 to be quoted a higher rent than their white counterpart for the same unit.

Another HUD-sponsored study asked respondents to a nationwide survey if they "thought" they had ever been discriminated against when trying to buy or rent a house or an apartment. 24 While the responses were subjective, they are consistent with the findings of the HDS. African Americans and Hispanics were considerably more likely than whites to say they have suffered discrimination—24 percent of African Americans and 22 percent of Hispanics perceived discrimination, compared to only 13 percent of whites.

Mortgage Lending Market. Research based on Home Mortgage Disclosure Act (HMDA) data suggests pervasive and widespread disparities in mortgage lending across the Nation. For 2001, the mortgage denial rate for white mortgage applicants was 23 percent, while 36 percent of African-American and 35 percent of Hispanic applicants were denied.

Two recent HUD-sponsored studies of paired-testing at the mortgage pre-application stage also points to discrimination by mortgage lenders. Based on its review of pair tests conducted by the National Fair Housing Alliance, the Urban Institute concluded that differential treatment discrimination at the pre-application level occurred at significant levels in at least some cities. 25 Minorities were less likely to receive information about loan products, received less time and information from loan officers, and were quoted higher interest rates in most of the cities where tests were conducted. A second **HUD-sponsored study by the Urban Institute** used the paired testing methodology in Los Angeles and Chicago and found similar results. African Americans and Hispanics faced a significant risk of unequal treatment when they visited mainstream mortgage lending institutions to make pre-application inquiries.26

¹⁸ Fannie Mae, Fannie Mae National Housing Survey, 2002, p. 11.

¹⁹ See Dan Immergluck, Stark Differences: The Explosion of the Subprime Industry and Racial Hypersegmentation in Home Equity Lending. Woodstock Institute, October 2000; and Daniel Immergluck and Marti Wiles, Two Steps Back: The Dual Mortgage Market, Predatory Lending, and the Undoing of Community Development, Woodstock Institute, Chicago, IL, November 1999. For a national analyses, see the HUD report Unequal Burden: Income and Racial Disparities in Subprime Lending in America, April 2000; and Randall M. Scheessele, Black and White Disparities in Subprime Mortgage Refinance Lending, Housing Finance Working Paper No. HF-114, Office of Policy Development and Research, U.S. Department of Housing and Urban Development, April 2002.

²⁰ Fannie Mae, *Fannie Mae National Housing Survey*, 2002, p. 9.

²¹ See "Immigration Changes Won't Hurt Housing," in *National Mortgage News*, January 27, 2003, page 8.

²² Donald S. Bradley and Peter Zorn, "Fear of Homebuying: Why Financially Able Households May Avoid Ownership," *Secondary Mortgage Markets*, 1996.

²³ Margery Austin Turner, Stephen L. Ross, George Galster, and John Yinger, "Discrimination in Metropolitan Housing Markets," *The Urban Institute Press*, November 2002.

²⁴ Martin D. Abravanel and Mary K. Cunningham, How Much Do We Know? Public Awareness of the Nation's Fair Housing Laws. A report prepared for HUD by the Urban Institute, Washington, DC, April 2002

²⁵ Margery Austin Turner, John Yinger, Stephen Ross, Kenneth Temkin, Diane Levy, David Levine, Robin Ross Smith, and Michelle deLair, What We Know About Mortgage Lending Discrimination. The Urban Institute, contract report for the Department of Housing and Urban Development, December 1998.

²⁶ Margery Austin Turner, *All Other Things Being Equal: A Paired Testing Study of Mortgage Lending Institutions*, The Urban Institute Press, April 2002.

Several possible explanations for these lending disparities have been suggested. A study by the Boston Federal Reserve Bank found that racial disparities cannot be explained by reported differences in creditworthiness.27 In other words, minorities are more likely to be denied than whites with similar credit characteristics, which suggests lender discrimination. In addition, loan officers, who may believe that race is correlated with credit risk, may use race as a screening device to save time, rather than devote effort to distinguishing the creditworthiness of the individual applicant.28 This violates the Fair Housing Act.

Underwriting rigidities may fail to accommodate creditworthy low-income or minority applicants. For example, under traditional underwriting procedures, applicants who have conscientiously paid rent and utility bills on time but have never used consumer credit would be penalized for having no credit record. Applicants who have remained steadily employed, but have changed jobs frequently, would also be penalized. As discussed in Section C below, lenders, private mortgage insurers, and the GSEs have been adjusting their underwriting guidelines to take into account these special circumstances of lower-income families. Many of the changes recently undertaken by the industry focused on finding alternative underwriting guidelines to establish creditworthiness that do not disadvantage creditworthy minority or low-income applicants. However, because of the enhanced roles of credit scoring and automated underwriting in the mortgage origination process, it is unclear to what degree the reduced rigidity in industry standards will benefit borrowers who have been adversely impacted by the traditional guidelines as discussed in section C.7, some industry observers have expressed a concern that the greater flexibility in the industry's written underwriting guidelines may not be reflected in the numerical credit and mortgage scores which play a major role in the automated underwriting systems that the GSEs and others have developed.

Disparities Between Neighborhoods. Mortgage credit also appears to be less accessible in low-income and high-minority neighborhoods. As discussed in Appendix B, 2001 HMDA data show that mortgage denial rates are nearly twice as high in census tracts with low-income and/or high-minority composition, as in other tracts (16.8 percent versus 8.7 percent). Numerous studies have found that mortgage denial rates are higher in low-income census tracts, even accounting for other loan and borrower characteristics.²⁹

These geographical disparities can be the result of cost factors, such as the difficulty of appraising houses in these areas because of the paucity of previous sales of comparable homes. Sales of comparable homes may also be difficult to find due to the diversity of central city neighborhoods. The small loans prevalent in low-income areas are less profitable to lenders because up-front fees to loan originators are frequently based on a percentage of the loan amount, although the costs incurred are relatively fixed. As noted above, racial disparities in mortgage access may be due to the fact that mainstream lenders are not doing business in certain inner city neighborhoods. There is evidence that mainstream lenders active in white and upper-income neighborhoods are much less active in low-income and minority neighborhoods-often leaving these neighborhoods to unregulated subprime lenders. Geographical disparities in mortgage lending are discussed further in Section C.8 below (which examines subprime lending) and in Appendix B (which examines the Underserved Areas Goal).

3. Affordability Problems and Worst Case Housing Needs

The severe affordability problems faced by low-income homeowners and renters are documented in HUD's "Worst Case Housing Needs" reports. These reports, which are prepared biennially for Congress, are based on the American Housing Survey (AHS), conducted every two years by the Census Bureau for HUD. The latest detailed report analyzes data from the 1999 AHS. Although it focuses on the housing problems faced by very-low-income renters, it also presents basic data on families and households in owner-occupied housing.³⁰

The "Worst Case" report measures three types of problems faced by homeowners and renters:

- 1. Cost or rent burdens where housing costs or rent exceed 50 percent of income (a "severe burden") or range from 31 percent to 50 percent of income (a "moderate burden");
- 2. The presence of physical problems involving plumbing, heating, maintenance, hallway, or the electrical system, which may lead to a classification of a residence as "severely inadequate" or "moderately inadequate;" and,
- 3. Crowded housing, where there is more than one person per room in a residence.

The study reveals that in 1999, 4.9 million households had "worst case" housing needs, defined as housing costs greater than 50 percent of household income or severely inadequate housing among unassisted very-low-income renter households. Among the 34 million renters in all income categories, 6.3 million (19 percent) had a severe rent burden and over one million renters (3 percent) lived in housing that was severely inadequate.

a. Problems Faced by Owners

Of the 68.8 million owner households in 1999, 5.8 million (8 percent) confronted a severe cost burden and another 8.7 million (12.7 percent) faced a moderate cost burden. There were 870,000 households with severe physical problems, 2 million with moderate physical problems and 905,000 that were overcrowded. The report found that 25 percent of American homeowners faced at least one severe or moderate problem.

Not surprisingly, problems were most common among very low-income owners. ³¹ Almost a third of these households (31 percent) faced a severe cost burden, and an additional 22 percent faced a moderate cost burden. And 8 percent of these families lived in severely or moderately inadequate housing, while 2 percent faced overcrowding. Only 42 percent of very-low-income owners reported no problems.

Over time the percentage of owners faced with severe or moderate physical problems has decreased, as has the portion living in overcrowded conditions. However, affordability problems have become more common-the shares facing severe (moderate) cost burdens were only 3 percent (5 percent) in 1978, but rose to 5 percent (11 percent) in 1989 and 8 percent (13 percent) in 1999. The increase in affordability problems apparently reflects a rise in mortgage debt in the late 1980s and early 1990s, from 21 percent of homeowners' equity in 1983 to 36 percent in 1995.32 The Joint Center for Housing Studies also attributes this to the growing gap between housing costs and the incomes of the nation's poorest households.³³ As a result of the increased incidence of severe and moderate cost burdens, the share of owners reporting no problems fell from 84 percent in 1978 to 78 percent in 1989 and 75 percent in 1999.

b. Problems Faced by Renters

Problems of all three types listed above are more common among renters than among homeowners. In 1999 there were 6.3 million renter households (19 percent of all renters) who paid more than 50 percent of their income for rent.³⁴ Another 7.1 million faced a moderate rent burden. Thus in total 40 percent of renters paid more than 30 percent of their income for rent.

Among very-low-income renters, 71 percent faced an affordability problem, including 40 percent who paid more than half of their income in rent. Almost one-third (31 percent) of renters with incomes between 51 percent and 80 percent of area median

²⁷ Alicia H. Munnell, Geoffrey M.B. Tootell, Lynn E. Browne, and James McEneaney, "Mortgage Lending in Boston: Interpreting HMDA Data," *American Economic Review*, 86, March 1996.

²⁸ See Charles W. Calomeris, Charles M. Kahn and Stanley D. Longhofer, "Housing Finance Intervention and Private Incentives; Helping Minorities and the Poor," *Journal of Money, Credit and Banking*, 26, August 1994, pp. 634–74, for more discussion of this phenomenon, which is called "statistical discrimination"

²⁹ Robert B. Avery, Patricia E. Beeson and Mark E. Sniderman, *Understanding Mortgage Markets:*

Evidence from HMDA, Working Paper Series 94–21, Federal Reserve Bank of Cleveland, December 1994.

³⁰ HUD has published an update on "worst case housing needs," which found that the number of such households rose from 4.86 million in 1999 to 5.07 million in 2001. However, detailed tables for 2001 have not been published.

³¹ Very-low-income households are defined as those whose income, adjusted for household size, does not exceed 50 percent of HUD-adjusted area median income. This differs from the definition adopted by Congress in the GSE Act of 1992, which uses a cutoff of 60 percent and which does not adjust income for family size for owner-occupied dwelling units.

³² Edward N. Wolff, "Recent Trends in the Size Distribution of Household Wealth," *The Journal of Economic Perspectives*, 12(3), (Summer 1998), p. 137

³³ Joint Center for Housing Studies, *The State of the Nation's Housing: 2000*, June 2000, p. 24.

³⁴ Rent is measured in this report as gross rent, defined as contract rent plus the cost of any utilities that are not included in contract rent.

family income also paid more than 30 percent of their income for rent.

Affordability problems have increased over time among renters. The shares of renters with severe or moderate rent burdens rose from 32 percent in 1978 to 36 percent in 1989 and 40 percent in 1999.

The share of households living in inadequate housing in 1999 was higher for renters (11 percent) than for owners (4 percent), as was the share living in overcrowded housing (5 percent for renters, but only 1 percent for owners). Crowding and inadequate housing were more common among lower-income renters, but among even the lowest income group, affordability was the dominant problem. The prevalence of inadequate and crowded rental housing diminished over time until 1995, while affordability problems grew.

Other problems faced by renters discussed in the most recent detailed "Worst Case" report include a sharp decline (of 2.3 million, or 14 percent) between 1991 and 1999 in the number of rental units affordable to very-low-income families, and a worsening of the national shortage of units affordable and available to extremely-low-income families (those with incomes below 30 percent of area median income). Shortages of units affordable and available to extremely-low-income households were most pressing in the West and Northeast, especially in metropolitan areas in those regions.

4. Rehabilitation and Other National Housing Needs

In addition to the broad housing needs discussed above, there are additional needs confronting specific sectors of the housing and mortgage markets. One example of these specific needs concerns the rehabilitation of the nation's older housing stock. A major problem facing lower-income households is that low-cost housing units continue to disappear from the existing housing stock. Older properties are in need of upgrading and rehabilitation. These aging properties are concentrated in central cities and older inner suburbs, and they include not only detached single-family homes, but also small multifamily properties that have begun to deteriorate. But obtaining the funds to fix up older properties can be difficult. The owners of small rental properties in need of rehabilitation may be unsophisticated in obtaining financing. The properties are often occupied, and this can complicate the rehabilitation process. Lenders may be reluctant to extend credit because of a sometimes-inaccurate perception of high credit risk involved in such loans. The GSEs and other market participants have recently begun to pay more attention to these needs for financing of affordable rental housing rehabilitation. However, extra effort is required, due to the complexities of rehabilitation financing, as there is still a need to do more.

The rehabilitation of our aging housing stock is but one example of the housing and mortgage issues that need to be addressed. Several other examples will be provided throughout the following sections on the economic, housing, and demographic conditions in the single-family and

multifamily markets, as well as in Appendices B–D. The discussion will cover a wide range of topics, such as subprime lending, predatory lending, automated underwriting systems, manufactured housing, the special needs of the single-family rental market, and challenges associated with producing affordable multifamily housing—just to name a few.

C. Factor 2: Economic, Housing, and Demographic Conditions: Single-Family Mortgage Market

This section discusses economic, housing, and demographic conditions that affect the single-family mortgage market. After a review of housing trends and underlying demographic conditions that influence homeownership, the discussion focuses on specific issues related to the single-family owner mortgage market. This subsection includes descriptions of recent market interest rate trends, refinance and home purchase activity, homebuyer characteristics, and the state of affordable lending. Other special topics examined include the growth in subprime lending, the increased use of automated underwriting, and the remaining homeownership potential among existing renters. Section D follows with a discussion of the economic, housing, and demographic conditions affecting the mortgage market for multifamily rental properties.

1. Recent Trends in the Housing Market

While most other sectors of the economy were weak or declining during 2001 and 2002, the housing sector showed remarkable strength. Despite the recession in 2001, factors such as record-low interest rates and continued price stability contributed to a record year in the housing market. In 2002 the U.S. economy moved into recovery with real GDP growing 2.4 percent. In October 2002, the 30-year home mortgage rate slipped below 6 percent for the first time since the mid-1960s. Favorable financing conditions and solid increases in house prices were the key supports to another record housing market during 2002. In fact, the year 2002 was among the strongest years experienced by the housing industry. By the end of 2002 the industry set many new records in singlefamily permits, new home sales, existing home sales, interest rates, and homeownership. Other indicators—total permits, starts, completions, and affordability—reached levels that were among the highest in the past two decades.

Single-Family Permits, Starts, and Completions. Builders took out 1,319,100 single-family permits in 2002, up 6.8 percent from 2001. The 2002 level was the highest number of single-family permits ever reported in the 43-year history of this series. Single-family starts totaled 1,359,700 housing units, up 6.8 percent from 2001, and the highest number of single-family starts since 1978. Construction was completed on 1,328,400 single-family housing units, up 5.8 percent from 2001. This is the highest number of single-family completions in 24 years.

Sales of New and Existing Homes. After leveling out in 2000, housing sales have boomed in the past two years, reaching a

record high in 2001 and again in 2002. New home sales, which increased an average 6.3 percent per year between 1992 and 2002, reached a record high of 976,000 units in 2002, an increase of 7.5 percent over 2001 sales. The market for new homes has been strong throughout the nation.

The National Association of Realtors reported that nearly 5.6 million existing homes were sold in 2002, overturning the old record set in 2001 by 5 percent, and setting an all-time high in the 34-year history of the series. Sales of existing homes reached record levels in three of the four major regions of the nation and came within 96 percent of the record in the Northeast in 2001. Combined new and existing home sales also set a national record of 6.2 million last year.

One of the strongest sectors of the housing market in past years had been manufactured homes, but that sector has declined recently. Between 1991 and 1996, manufactured home shipments more than doubled, peaking in 1998 at 373,000. However, shipments fell more than 20 percent in both 2000 and 2001. In 2002, the industry shipped 169,000 new manufactured homes, down 12.4 percent from 2001. This was the lowest number of manufactured home shipments since 1963.

Homeownership Rate. In 1980, 65.6 percent of Americans owned their own home, but due to the unsettled economic conditions of the 1980s, this share fell to 63.8 percent by 1989. But since 1994, gains in the homeownership rate have occurred in each year, with the rate reaching another record mark of 67.9 percent in 2002. The number of households owning their own home in 2002 was 10.6 million greater than in 1994.

Gains in homeownership have been widespread over the last eight years.³⁵ As a result, the homeownership rate rose from:

- 42.0 percent in 1993 to 47.9 percent in 2002 for African-American households,
- 39.4 percent in 1993 to 48.2 percent in 2002 for Hispanic households,
- 73.7 percent in 1993 to 78.9 percent in 2002 for married couples with children,
- 65.1 percent in 1993 to 68.6 percent in 2002 for household heads aged 35–44, and
- 48.9 percent in 1993 to 51.8 percent in 2002 for central city residents.

However, as these figures demonstrate, sizable gaps in homeownership remain.

Economy/Housing Market Prospects. The economy grew at a rate of 2.2 percent in 2002 and was less robust than in past U.S. recoveries.³⁶ In response, the Federal Reserve has lowered interest rates to record lows, supporting housing affordability.

The Blue Chip consensus forecast for real GDP growth is 4.2 percent for 2004.³⁷ The Congressional Budget Office (CBO) ³⁸ projects

³⁵ Homeownership rates prior to 1993 are not strictly comparable with those beginning in 1993 because of a change in weights from the 1980 Census to the 1990 Census.

³⁶ National Association of Realtors, "Near Record Home Sales Projected for 2003," December 3, 2002. ³⁷ Blue Chip Economic Indicators, Vol. 28, No. 11,

³⁷ Blue Chip Economic Indicators, Vol. 28, No November 10, 2003.

³⁸ Real GDP, unemployment, inflation, and treasury note interest rate projections are obtained for fiscal years 2003–2013 from The Budget and Economic Outlook: An Update, Washington, DC Congressional Budget Office. (August 2003). http://www.cbo.gov/showdoc.cfm.

that real GDP will grow at an average rate of 3.3 percent from 2005 through 2008, down from their forecasted rate of 3.8 percent in 2004. Inflation, as measured by the Consumer Price Index (CPI), is projected to remain modest during the same period, averaging 2.5 percent. The unemployment rate is expected to ease from 2003–2004 levels, averaging 5.4 percent over the forecast period. The remainder of this subsection focuses on future prospects for the housing market.

Fannie Mae expects existing home sales to reach a record level of 6 million in 2003 and decline only slightly to 5.7 million in 2004 and 2005.39 Projected at 1.84 million in 2003, the National Association of Home Builders expects housing starts to decline to 1.77 million in 2004 and 1.71 million in 2005.40 The Mortgage Bankers Association forecasts that 2004 housing starts will total 1.73 million units and the 30-year fixed mortgage rate will average 6.1 percent.41 After more than doubling from a relative trough in 2000 to an estimated \$2.6 trillion in 2002, Fannie Mae forecasts that mortgage originations will rise to a record high \$3.7 trillion in 2003 before dropping to \$1.8 trillion in 2004 and \$1.5 trillion in 2005.42

2. Underlying Demographic Conditions

Between 2000 and 2025, the U.S. population is expected to grow by an average of 2.5 million per year.43 This will likely result in 1.1 million new households per year, increasing the number of households 26 percent in the period, and creating a continuing need for additional housing.44 This section discusses important demographic trends behind these overall household numbers that will likely affect housing demand in the future. These demographic forces include the baby-boom, baby-bust and echo baby-boom cycles; immigration trends; non-traditional and single households; "trade-up buyers;" and the growing income inequality between people with different levels of education. HUD's Office of Policy Development and Research funded a study, Issue Papers on Demographic Trends Important to Housing, which analyzes effects of demographic conditions on the housing market. The findings are presented throughout the sections that follow.45

As explained below, the role of traditional first-time homebuyers, 25-to-34 year-old married couples, in the housing market will be smaller in the current decade due to the aging of the population. For the first time in history, the population will have roughly equal numbers of people in every age group. Between 2000 and 2025, the Census Bureau projects that the largest growth in households will occur among householders 65 and over.46 Thus, an increasing percentage of the population will be past their homebuying peak in the next two decades. However, because homeownership rates do not peak until population groups reach 65 to 74 years of age, this age cohort will continue to provide housing demand. According to Riche, the increasing presence of older households should increase the proportion of the population that owns, rather than rents housing.47

Growing housing demand from immigrants and non-traditional homebuyers will help to offset declines in the demand for housing caused by the aging of the population. Riche's study estimates that minorities will account for two-thirds of the growth in U.S. households over the next 25 years, and by 2025, non-family households will make up a third of all households. The "echo baby-boom" (that is, children of the baby-boomers) will also add to housing demand in the current and next decades. Finally, the growing income inequality between people with and without a post-secondary education will continue to affect the housing market.

The Baby-Boom Effect. The demand for housing during the 1980s and 1990s was driven, in large part, by the coming of homebuying age of the baby-boom generation, those born between 1945 and 1964. Homeownership rates for the oldest of the baby-boom generation, those born in the 1940s, rival those of the generation born in the 1930s. Due to significant house price appreciation in the late-1970s and 1980s, older baby-boomers have seen significant gains in their home equity and subsequently have been able to afford larger, more expensive homes. Circumstances were not so favorable for the middle baby-boomers. Housing was not very affordable during the 1980s, their peak homebuying age period. As a result, the homeownership rate, as well as wealth accumulation, for the group of people born in the 1950s lags that of the generations before them.48

As the youngest of the baby-boomers (those born in the 1960s) reached their peak home buying years in the 1990s, housing became

more affordable. While this cohort has achieved a homeownership rate equal to the middle baby-boomers, they live in larger, more expensive homes. As the baby-boom generation ages, demand for housing from this group is expected to wind down.⁴⁹

The baby-boom generation was followed by the baby-bust generation, from 1965 through 1977. Since this population cohort is smaller than that of the baby boom generation, it reduced housing demand in the preceding decade and is expected to do the same in the current decade, though, as discussed below, other factors kept the housing market very strong in the 1990s. However, the echo baby-boom generation (the children of the baby-boomers, who were born after 1977), while smaller than the baby-boom generation, will reach peak home buying age later in the first decade of the millennium.

Immigrant Homebuyers. Past, present, and future immigration will also contribute to gains in the homeownership rate. During the 1990s, 9.8 million legal immigrants entered the United States, as compared to 6.3 million entering in the 1980s and 4.2 million during the 1970s. Overall, the increase in the immigrant population directly accounted for 35 percent of the nation's rise in population in the 1990s.50 As a result, the foreign-born population of the United States more than tripled from 9.6 million in 1970 to 31.1 million in 2000. Immigrants who become citizens buy homes at rates nearly as high as their same-aged native-born counterparts. Moreover, U.S.-born children of immigrants often have higher homeownership rates than the same-age children of native-born parents.51 However, there are concerns about the assimilation into homeownership of recent Hispanic immigrants who are less educated than earlier cohorts of immigrants. Many immigrants also locate in high-priced housing markets, which makes it more difficult for them to achieve homeownership.

Although net foreign immigration is projected to decline in the current decade after 2002, high levels of immigration in the late 1980s and throughout the 1990s will have lasting positive effects on housing demand. New immigration in the current and next decades is projected to create 6.9 million net new households, but the majority of household growth in the period (16.9 million) will come from people already resident in the U.S. including the foreignborn population.⁵² While immigrants tend to rent their first homes upon arriving in the United States, homeownership rates are substantial for those that have lived here for at least 6 years. In 1996, the homeownership

³⁹ Fannie Mae, "Berson's Economic and Mortgage Market Development Outlook," December 2003. http://www.fanniemae.com/media/pdd/berson/ monthly2003/121203.pdf.

⁴⁰ http://www.nahb.org.

⁴¹Mortgage Bankers Association of America, Mortgage Finance Forecast, December 17, 2003. http://www.mbaa.org/marketdata/forecasts/ mffore1103.pdf.

⁴² Fannie Mae, "Berson's Economic and Mortgage Market Development Outlook," December 2003.

 $^{^{\}rm 43}\,U.S.$ Census Bureau, Population Projections Table NP–T1.

⁴⁴Martha Farnsworth Riche, "How Changes in the Nation's Age and Household Structure Will Reshape Housing Demand in the 21st Century," in Issue Papers on Demographic Trends Important to Housing, Urban Institute Final Report to the Office of Policy Development and Research, U.S. Department of Housing and Urban Development, September 2002, p. 5.

⁴⁵ Barry Chiswick, Paul Miller, George Masnick, Zhu Xiao Di, and Martha Farnsworth Riche, *Issue*

Papers on Demographic Trends Important to Housing. Urban Institute Final Report to the Office of Policy Development and Research, U.S. Department of Housing and Urban Development, September 2002.

⁴⁶Martha Farnsworth Riche, "How Changes in the Nation's Age and Household Structure Will Reshape Housing Demand in the 21st Century," in Issue Papers on Demographic Trends Important to Housing. Urban Institute Final Report to the U.S. Department of Housing and Urban Development, September 2002, p. 4.

⁴⁷ *Ibid.* p. 6.

⁴⁸ Joint Center for Housing Studies of Harvard University, *State of the Nation's Housing 1998*, p. 14.

⁴⁹ *Ibid.* p. 15.

⁵⁰ Federation for American Immigration Reform, http://www.fairus.org/html/042us604.htm#ins, site visited December 13, 2002.

⁵¹ Joint Center for Housing Studies of Harvard University, *State of the Nation's Housing 2002*, pp. 16–17.

⁵² George S. Masnick and Zhu Xiao Di, "Projections of U.S. Households By Race/Hispanic Origin, Age, Family, Type, and Tenure to 2020: A Sensitivity Analysis," in *Issue Papers on Demographic Trends Important to Housing*. Urban Institute Final Report to the U.S. Department of Housing and Urban Development, September 2002, p. 5.

rate for recent immigrants was 14.7 percent while it was 66.9 percent for foreign-born naturalized citizens after six years.⁵³ Higherthan-average foreign-born fertility rates and high rates of homeownership for immigrants living in the country for several years and among the children of immigrants suggest that past immigration will continue to create housing demand.

Past and future immigration will lead to increasing racial and ethnic diversity, especially among the young adult population. As immigrant minorities account for a growing share of first-time homebuyers in many markets, HUD and others will have to intensify their focus on removing discrimination from the housing and mortgage finance systems. The need to meet nontraditional credit needs, respond to diverse housing preferences, and overcome the information barriers that many immigrants face will take on added importance. In order to address these needs, the mortgage industry must offer innovative products and improve outreach efforts to attract minority homebuyers.

Nontraditional and Single Homebuyers. While overall growth in new households has slowed down, nontraditional households have become more important in the homebuyer market. As the population ages both relatively and absolutely, the nation's households will become smaller and more diverse. Riche notes that in 2000, traditional family households represented fewer than one in four households and were surpassed by both single-person households and married couples without children. With later marriages and more divorces, single-parent and single-person households have increased rapidly. In fact, single-parent households grew from 4 percent of family households in 1950 to 12 percent in 2000. Single-person households are now the nation's second most numerous household type, accounting for over 25 percent of all households. In the future, longer life expectancies and the continuing preference for one or two children will make households without children even more numerous. Projected to compose 80 percent of all households by 2025, nontraditional family households will play an increasingly important role in the housing market.54

Trade-up Buyers. Due to weak house price appreciation, traditional "trade-up buyers" stayed out of the market during the early 1990s. Their absence may explain, in part, the large representation of nontraditional homebuyers during that period. However, since 1995 home prices have increased more than 30 percent.⁵⁵ The greater equity resulting from recent increases in home prices should lead to a larger role for "trade-up buyers" in the housing market during the next 10 to 15 years. In addition, the growing number of higher-income, mid-life households will increase households'

potential to "trade up" to more expensive housing. 56

Growing Income Inequality. The Census Bureau recently reported that the top 5 percent of American households received 22.4 percent of aggregate household income in 2001, up from 21.4 percent in 1998 and up sharply from 16.1 percent in 1977. The share accruing to the lowest 80 percent of households fell from 56.5 percent in 1977 to 50.8 percent in 1998 and again to 49.8 percent in 2001. The share of aggregate income accruing to households between the 80th and 95th percentiles of the income distribution was virtually unchanged from 1977 to 2001.⁵⁷

The increase in income inequality over past decades has been especially significant between those with and those without post-secondary education. The Census Bureau reports that by 1999, the annual earnings of workers with a bachelor's degree were 1.8 times the annual earnings of workers with a high school education. ⁵⁸ The inflation-adjusted median earnings of high school graduates were at the same level in 2001 as in 1991 while the earnings of bachelor degree-holders rose nearly 9 percent over the same period. ⁵⁹

So, while homeownership is highly affordable, those without post-secondary education often lack the financial resources to take advantage of the opportunity. As discussed earlier, the days of the well-paying unionized factory job have passed. They have given way to technological change that favors white-collar jobs requiring college degrees, and wages in the manufacturing jobs that remain are experiencing downward pressures from economic globalization. The effect of this is that workers without the benefit of a post-secondary education find their demand for housing constrained. This is especially problematic for recent immigrants who are more likely to have limited educational attainment and English language proficiency.

Summary. Over the next two-and-a-half decades, the number of U.S. households is projected to increase by nearly 27 million. Of these new households, non-Hispanic white and traditional households will contribute only one-third and one-tenth of the growth, respectively. As the baby-boomers aged out of their peak home buying stage and the baby-bust generation aged into their peak home buying stage in the late 1980s, demand for housing was dampened by demographic factors during the 1990s. (Of course, other factors such as low interest rates propelled the housing market to record levels during this period.) As the echo baby-boomers begin to enter their peak home buying age, housing demand should pick up again through the remainder of the current decade and into the next. As these demographic factors play out, the overall effect on housing demand will

likely be sustained growth and an increasingly diverse household population from which to draw new homeowners. There are continuing concerns about the increasing income inequality of our population and those recent immigrants and other persons who have limited education.

3. Basic Trends in the Single-Family Mortgage Market

Mortgage lending in the nation is growing at unprecedented levels. Residential mortgage originations soared to \$2.5 trillion in 2002, a 22 percent increase over the previous record of \$2.06 trillion set in 2001.60 This boom in lending can be attributed to low mortgage interest rates and a record number of refinances. Approximately 40 percent of mortgage debt outstanding, or \$2.5 trillion, was refinanced during the 2001-02 refinance boom. The last refinancing record was set in 1998 when roughly 20 percent of mortgage debt outstanding was refinanced.61 This section focuses on recent interest rate trends, the refinance market, the home purchase market, and first-time homebuyers. The section concludes by examining the GSEs acquisitions as a share of the primary singlefamily mortgage market, and provides mortgage market prospects.

a. Mortgage Characteristics

Interest Rate Trends and Volatility. Historically low mortgage interest rates in the late 1990s and 2001-2003 helped maintain consumer confidence in the housing sector as the economy emerged from its first recession in almost a decade. After high and fluctuating mortgage rates in the 1980s and early 1990s, recent years have seen a period of lower and more stable rates. The 1980s began with interest rates on mortgages for new homes above 12 percent but quickly rose to more than 15 percent. 62 By 1987–88, rates dipped into single digits but were rising again by 1989-90. Rates declined in the early 1990s, reaching a low of 6.8 percent in late 1993. An upturn in rates in 1994 and 1995 peaked at 8.3 percent in early 1995. By 1998, 30-year fixed conventional mortgages averaged 6.95 percent, the lowest level since 1968 but saw a rise in 1999 to 7.44 percent. Mortgage rates then continued to rise in 2000, averaging 8.05 percent for the year, before falling to a low of 6.62 percent in October 2001 and averaging 6.97 percent for 2001 as a whole.⁶³ Rates averaged 6.54 percent during 2002, reaching a low of 6.05

⁵³ Fred Flick and Kate Anderson, "Future of Housing Demand: Special Markets," *Real Estate Outlook*, 1998, p. 6.

⁵⁴ Riche, 2002, p. 1.

⁵⁵ Average new-home price: U.S. Census Bureau, http://www.census.gov/const/uspriceann.pdf>

 $^{^{56}\,}Riche,\,2002,\,p.17.$

 $^{^{57}}$ All data in this paragraph are from the U.S. Census Bureau's Historical Income Table H2.

⁵⁸ Jennifer Cheeseman Day and Eric C. Newburger, *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings*, U.S. Bureau of the Census, Current Population Reports P23–210, July 2002, p.3.

⁵⁹ U.S. Census Bureau, Historical Income Table

⁶⁰ ''Mortgage Originations Hit Record-Busting \$2.5 Trillion in 2002, IMF Numbers Reveal,'' *Inside Mortgage Finance*, January 24, 2003, p. 3.

⁶¹ Economy.com, "The Economic Contribution of the Mortgage Refinancing Boom," December 2002, p. 2.

⁶² Interest rates in this section are effective rates paid on conventional home purchase mortgages on new homes, based on the Monthly Interested Rate Survey (MIRS) conducted by the Federal Housing Finance Board and published by the Council of Economic Advisers annually in the Economic Report of the President and monthly in Economic Indicators. These are average rates for all loan types, encompassing 30-year and 15-year fixed-rate mortgages and adjustable rate mortgages.

⁶³ U.S. Housing Market Conditions, 2nd Quarter 2002, August 2002, Table 14.

percent in December of that year. Falling further to 5.23 in June of 2003, mortgage interest rates remained low throughout last year, averaging 5.79 through September.⁶⁴

Other Loan Terms. When mortgage rates are low, most homebuyers prefer to lock in a fixed-rate mortgage (FRM). Adjustable-rate mortgages (ARMs) are more attractive when rates are high, because they carry lower rates than FRMs and because buyers may hope to refinance to a FRM when mortgage rates decline. The Federal Housing Finance Board (FHFB) reports that the ARM share of the market fell from 20 percent in 1993 to a record low of 12 percent in 1998, before rising back to 21 percent in 1999. The ARM share continued to rise to 24 percent in 2000, but then fell dramatically to a low of 12 percent in 2001 as mortgage rates decreased.

In 2001, the term-to-maturity was 30 years for 83 percent of conventional home purchase mortgages, after steadily climbing to a high of 90 percent in 2000. The other maturities in 2001 included 15 years (13 percent), 20 years (3 percent), and 25 years (1 percent).

Low- and no-point mortgages continue to be a popular option for mortgage purchases. FHFB reports that average initial fees and charges ("points") have decreased from 2.5 percent of loan balance in the mid-1980s to 2 percent in the late-1980s, 1.5 percent in the early 1990s, and less than 1 percent in 1995–97. The downward trend continued throughout the late 1990s with the average initial fees and charges reaching a low of one-half percent in 2001. Coupled with declining interest rates, these lower transactions costs have increased the propensity of homeowners to refinance their mortgages. 65

Another major change in the conventional home mortgage market has been the proliferation of high loan-to-value ratio (LTV) mortgages. According to data from the Federal Housing Finance Board, loans with LTVs greater than 90 percent (that is, down payments of less than 10 percent) made up less than 10 percent of the market in 1989-91, but 25 percent of the market in 1994-97, gradually decreasing to an average of 21 percent of the market in 2001. Loans with LTVs less than or equal to 80 percent fell from three-quarters of the market in 1989-91 to an average of 56 percent of the market in 1994-97, but then rose to an average of 63 percent of mortgages originated in 1998-2001. As a result, the average LTV rose from 75 percent in 1989–91 to nearly 80 percent in 1994-97, and then declined to 76.2 percent in 2001.66

b. Refinance Mortgages

Refinancing has fueled the growth in total mortgage originations, which were \$638 billion in 1995 (a period of low refinance activity), but topped \$2.5 trillion in 2002 (a period of heavy refinance activity). The refinance share of total mortgage originations rose to 50 percent in 1998, then decreased to 19 percent in 2000 before jumping to 57 percent in 2001.67 Over the past ten years, refinance booms occurred three times, during 1992-93, 1998, and 2001-02. During the 2001–02 refinance boom, approximately 40 percent of the \$2.5 trillion in mortgage debt outstanding was refinanced. The last refinancing record was set in 1998 when roughly 20 percent of mortgage debt outstanding was refinanced.68

In 1989–90 interest rates exceeded 10 percent, and refinancings accounted for less than 25 percent of total mortgage originations.⁶⁹ The subsequent sharp decline in mortgage rates drove the refinance share over 50 percent in 1992 and 1993 and propelled total single-family originations to more than \$1 trillion in 1993—twice the level attained just three years earlier.

The refinance wave subsided after 1993, because most homeowners who found it beneficial to refinance had already done so and because mortgage rates rose once again. Total single-family mortgage originations bottomed out at \$638 billion in 1995, when the refinance share was only 21 percent. Total originations, driven by the volume of refinancings, amounted to \$1.507 trillion in 1998, nearly 50 percent higher than the previous record level of \$1.02 trillion attained in 1993.

The refinance wave from late 1997 through early 1999 reflected other factors besides interest rates, including greater borrower awareness of the benefits of refinancing, a highly competitive mortgage market, and the enhanced ability of the mortgage industry, utilizing automated underwriting and mortgage origination systems to handle an unprecedented volume of originations. The refinance share decreased to 19 percent in 2000 before jumping to a record 57 percent in 2001.

Historically low interest rates and declining mortgage transaction costs have driven the latest refinancing boom. Given

these conditions, the after-tax cost saving on a new, lower-rate loan is much greater than the transaction costs of refinancing. In addition, the appreciation of housing prices has also contributed to the increase in refinancing. Over the past five years, the value of housing rose by approximately \$5 trillion, and the rise in value has enabled lenders to service refinancing homeowners because of greater confidence in the creditworthiness of borrowers.

Over the past few years, homeowners have become more willing to draw on the rising equity in their homes. According to Fannie Mae's 2002 National Housing Survey, homeowners that refinanced during 2001 withdrew about \$110 billion in accumulated home equity wealth. 72 Freddie Mac estimates that more than one-half of all refinance mortgages in the past two years involved cash-out refinancing. 73

The refinancing boom contributed to an estimated one-fifth of the national economy's real GDP growth since late 2000.74 During 2001 and 2002, roughly \$270 billion was raised in cash-out refinancing. Approximately one-half of cash from cashout refinancing has enabled consumers to finance more spending for expenses such as home improvements, medical payments, education, and vehicles during a weakened economy. Roughly one-third of the cash from cash-out refinancing has allowed consumers to repay other debt. 75 The remaining cash from cash-out refinancing has enabled consumers to invest in other assets. Refinancing households save approximately \$10 billion in their annual interest payments on their mortgage and consumer installment liabilities.

Although the refinancing boom may quickly fade if mortgage rates rise in 2004, the boom will have lingering effects. Mortgage borrowers that were able to secure low long-term interest rates through fixed rate mortgages will have more of their budgets to spend on other items. Meanwhile, cash-out borrowers, who are just receiving their money, will spend this year. It must be noted there is some concern regarding the potential for increased credit risk stemming from mortgage debt from cash out borrowers. According to a 2002 Regional Finance Review article, the mortgage liabilities of households have been growing at a rate more than double the growth in household incomes. However, this potential credit risk is moderated by the strong growth in housing values. The ratio of mortgage debt to housing

⁶⁴ Mortgage Bankers Association website. MBA Weekly Survey of Mortgage Applications, Monthly Average Interest Rates on 30-Year Fixed-Rate Mortgages. http://www.mortgagebankers.org/ marketdata/index.html.

⁶⁵ This is discussed in more detail in Paul Bennett, Richard Peach, and Stavros Peristani, Structural Change in the Mortgage Market and the Propensity to Refinance, Staff Report Number 45, Federal Reserve Bank of New York, September

⁶⁶ Other sources of data on loan-to-value ratios such as the American Housing Survey and the Chicago Title and Trust Company indicate that high-LTV mortgages are somewhat more common in the primary market than the Finance Board's survey. However, the Chicago Title survey does not

separate FHA-insured loans from conventional mortgages. In addition, the statistics cited above pertain only to home purchase mortgages. Refinance mortgages generally have shorter terms and lower loan-to-value ratios than home purchase mortgages.

⁶⁷The source for the refinance share and total mortgage originations was the Mortgage Bankers Association.

⁶⁸ Economy.com, "The Economic Contribution of the Mortgage Refinancing Boom," December 2002, p. 2.

⁶⁹ Refinancing data is taken from Freddie Mac's monthly *Primary Mortgage Market Survey*.

⁷⁰ There is some evidence that lower-income borrowers did not participate in the 1993 refinance boom as much as higher-income borrowers—see Paul B. Manchester, *Characteristics of Mortgages Purchased by Fannie Mae and Freddie Mac: 1996–97 Update*, Housing Finance Working Paper No. HF–006, Office of Policy Development and Research, Department of Housing and Urban Development, August 1998, pp. 30–32.

 $^{^{71}\}mbox{Economy.com},$ ''The Economic Contribution of the Mortgage Refinancing Boom,'' December 2002, p. 4.

⁷²Fannie Mae, *2002 Fannie Mae National Housing Survey.* http://www.fanniemae.com/global/pdf/media/survey/survey2002, September 4, 2002, p. 2.

 $^{^{73}\,\}rm Economy.com,$ ''The Economic Contribution of the Mortgage Refinancing Boom,'' December 2002, p. 4.

⁷⁴Mark M. Zandi, "Refinancing Boom," *Regional Finance Review*, December 2002, p. 11.

⁷⁵ *Ibid.* p. 14.

values, the aggregate loan-to-value ratio, has remained fairly stable for a decade. 76

c. Home Purchase Mortgages

The volume of home purchase mortgages was \$505 billion in 1995, rose to \$848 billion in 1999, and remained in the \$829-\$873 billion range between 1999-2001 before jumping to \$1.02 trillion in 2002 and \$1.30 trillion in 2003. The Mortgage Bankers Association (MBA) forecasts that the home purchase volume will be \$1.34 trillion in 2004 as the home purchase share rises to 54 percent of all originations.77 The home purchase share of total mortgage originations was 79 percent in 1995, declined to 50 percent in 1998, rose to 81 in 2000, and sharply fell to 43 percent in 2001, 41 in 2002, and 34 percent in 2003, as refinance mortgage volume grew. This section discusses the important issue of housing affordability and then examines the value of homeownership as an investment.

The National Association of Realtors (NAR) has developed a housing affordability index, calculated as the ratio of median household income to the income needed to qualify for a median price home (the latter income is called the "qualifying income"). In 1993, NAR's affordability index was 133, which meant that the median family income of \$37,000 was 33 percent higher than that income needed to qualify for the median priced home. Housing affordability remained at about 130 for 1994-97, with home price increases and somewhat higher mortgage rates being offset by gains in median family income.⁷⁸ Falling interest rates and higher income led to an increase in affordability to 143 in 1998, reflecting the most affordable housing in 25 years. Affordability remained high in 1999, despite the increase in mortgage rates. NAR's affordability index declined from 140 in 1999 to 129 in 2000 as mortgage rates increased. The index turned upward to 136 in 2001 as mortgage rates fell and maintained this average in 2002, before rising further to 140 in 2003.79

Although the share of home purchase loans for lower-income households and/or households living in lower-income communities increased over the past decade, affordability still remains a challenge for many. The median sales price of existing single-family homes in the United States continues to rise, reaching \$158,100 in 2002 and \$170,000 in 2003. The production of affordable housing and low interest rates could offset the negative impact of rising house prices, which undermine housing affordability for many Americans, particularly in several high-cost markets on the east and west coasts.

⁷⁶ Economy.com, "The Economic Contribution of the Mortgage Refinancing Boom," December 2002, p. 9. As discussed earlier, barriers are preventing many potential homeowners from becoming homeowners, thus reducing the possible amount of home purchase loans. While the strong housing sector has provided financial security for many Americans, a 2002 Fannie Mae survey found that "information barriers still keep many financially qualified families-particularly minority Americans from becoming homeowners or obtaining the lowest-cost financing available to them." 80

These homeownership barriers pose a serious problem for many Americans who view homeownership as a smart, safe, long-term investment, rating homeownership as a better investment than the stock market. Home equity is the single most important asset for approximately two-thirds of American households that are homeowners. Considering that half of all homeowners held at least 50 percent of their net wealth in home equity in 1998, increasing housing affordability is important for many Americans.⁸¹

First-time Homebuyers. First-time homebuyers are a driving force in the nation's mortgage market. The current low interest rates have made it an opportune time for first-time homebuyers, which are typically people in the 25-34 year-old age group that purchase modestly priced houses. As the post-World War II baby boom generation ages, the percentage of Americans in this age group decreased from 28.3 percent in 1980 to 25.4 percent in 1992.82 Even though this cohort is smaller, first-time homebuyers increased their share of home sales. According to Chicago Title data for major metropolitan areas, the first-time buyer share of the homebuyer market increased from roughly 40 percent in the beginning of the 1990s to 45-47 percent during the-mid and late 1990s.83 Since the late 1990s, industry survey data suggest that the firsttime homebuyer percentage has decreased slightly. In the first quarter of 2003, the share of all home purchases by first-time homebuyers was 40 percent compared to 42 percent in 2001.84

In the 1990s, lenders developed special programs targeted to first-time homebuyers and revised their underwriting standards to enhance homeownership opportunities for low-income families with special circumstances. The disproportionate growth in the number of first-time homebuyers and minority homebuyers largely drove the rising trend in total home purchases. Analysis of the American Housing Survey (AHS) indicates there were 1.3 million new first-time homebuyers during 1991, in comparison with over two million in each year between

1996 and 2001. In addition, first-time homebuyers comprised approximately 60 percent of all minority home purchases during the 1990s, compared with about 35 percent of all home purchases by non-Hispanic white families.

In comparison to repeat homebuyers, firsttime homebuyers are more likely to be younger, have lower incomes, and purchase less expensive houses. According to the AHS, more than one-half or first-time homebuyers were below the age of 35, compared with less than one-quarter of repeat buyers in the 1990s. Thirty-nine percent of first-time buyers had incomes below 80 percent of the median compared to 30 percent of repeat buyers. Fifty-four percent of first-time buyers purchased homes priced below \$100,000, compared to 37 percent of repeat buyers. Minorities comprise a higher proportion of first-time buyers (32 percent) compared to repeat buyers (14 percent). Compared to repeat buyers, first-time homebuyers are more likely to purchase a home in the central city and more likely to be a female-headed household.85

The National Association of Realtors reports that the average first-time homebuyer in the first quarter of 2003 was 32 years old with a household income of \$54,800, compared to an average age of 46 years and average household income of \$74,600 for repeat buyers. The average first-time homebuyers made a downpayment of 6 percent on a home that cost \$136,000 while the average repeat buyer made a downpayment of 23 percent on a home costing \$189,000. In the NAR survey, 37 percent of first-time homebuyers were single compared to 28 percent of repeat buyers. 86

Many African Americans and Hispanics are likely to purchase homes in the coming years, contributing to the number of first-time home-buyers fueling growth in the housing sector. The number of homeowners will rise by an average of 1.1 million annually over the next two decades. The sizeable rise in the foreign-born population since the 1970's coupled with the increase in Latin American and Asian immigration will also contribute much to this growth.⁸⁷

d. GSEs' Acquisitions as a Share of the Primary Single-Family Mortgage Market

Purchases by the GSEs of single-family mortgages amounted to \$519 billion during the heavy refinancing year of 1993, stood at \$215 billion in 1995, and were at \$618 billion during the heavy refinancing year of 1998. Purchases then fell to \$395 billion in 2000 before reaching record levels during the heavy refinancing years of 2001 (\$961 billion) and 2002 (\$1,090 billion). Purchases by Fannie Mae decreased from \$316 billion in 1999 to \$227 billion in 2000, before rising to \$568 billion in 2001 and \$848 billion in 2002. Freddie Mac's single-family mortgage purchases followed a similar trend, falling

⁷⁷ Mortgage Bankers Association, "Mortgage Finance Forecast", March 15, 2004. http://www.mortgagebankers.org/marketdata/forecasts/mffore1203.pdf.

⁷⁸ Housing affordability varies markedly between regions, ranging in January 2004 from 194 in the Midwest to 107 in the West, with the South and Northeast falling in between.

⁷⁹ National Association of REALTORS. Housing Affordability Index, http://www.realtor.org/Research.nsf/Pages/HousingInx, 2003.

 $^{^{80}\,}Fannie$ Mae, September 4, 2002, p. 2.

⁸¹ Ibid.

⁸² U.S. Department of Commerce, Bureau of the Census, *Money Income of Households, Families, and Persons in the United States: 1992,* Special Studies Series P–60, No. 184, Table B–25, October 1993

⁸³ Chicago Title and Trust Family of Insurers, Who's Buying Homes in America, 1998.

⁸⁴ National Association of Realtors. "New NAR Survey of Home Buyers and Sellers Shows Growing Web Use in a Dynamic Housing Market." http:// www.realtor.org.

⁸⁵ U.S. Housing Market Conditions, 3rd Quarter 2001, November 2001, Table 4.

⁸⁶ National Association of Realtors. "New NAR Survey of Home Buyers and Sellers Shows Growing Web Use in a Dynamic Housing Market." http://www.realtor.org.

⁸⁷ Joint Center for Housing Studies at Harvard University, *State of the Nation's Housing 2002*, p.2.

from \$233 billion in 1999 to \$168 billion in 2000, and then rising to \$393 billion in 2001 and \$475 billion in 2002.88

The Office of Federal Housing Enterprise Oversight (OFHEO) estimates that the GSEs' share of total originations in the conventional single-family mortgage market, measured in dollars, declined from 37 percent in 1996 to 32 percent in 1997—well below the peak of 51 percent attained in 1993. OFHEO attributes the 1997 downturn in the GSEs' role to increased holdings of mortgages in portfolio by depository institutions and to increased competition with Fannie Mae and Freddie Mac by private label issuers. However, OFHEO estimates that the GSEs' share of the conventional market rebounded sharply in 1998-99, to 43-42 percent. The GSEs' share then decreased to approximately 30 percent of the single-family conventional mortgages originated in 2000, and then increased sharply to 40 percent in 2001. Total GSE purchases, including loans originated in prior years, amounted to 46 percent of conventional originations in 2001.89

e. Mortgage Market Prospects

The Mortgage Bankers Association (MBA) reports that mortgage originations in 2001 were \$2.0 trillion, which is almost twice the volume of originations in 2000. Mortgage originations then increased to record levels of \$2.5 trillion in 2002 and \$3.8 trillion in 2003, with refinancings representing 66 percent of originations and the purchase volume amounting to \$1.3 trillion. Estimates indicate that ARMs accounted for 19 percent of total mortgage originations in 2003.90 In its March 15, 2004 forecast, MBA predicts that singlefamily mortgage originations will amount to \$2.5 trillion in 2004 and \$1.9 trillion in 2005, with refinancings representing 46 percent and 25 percent of originations respectively.

4. Affordable Lending in the Mortgage Market: New Products and Outreach

Extending homeownership opportunities to historically underserved households has been a growing concern for conventional lenders, private mortgage insurers and the GSEs. The industry has responded in what some have called a "revolution in affordable lending." The industry has offered more customized mortgage products, more flexible underwriting, and expanded outreach so that the benefits of the mortgage market can be extended to those who have not been adequately served through traditional products, underwriting, and marketing.

Fannie Mae and Freddie Mac have been a part of this "revolution in affordable lending." During the mid-to-late 1990s, they added flexibility to their purchase guidelines, they introduced new low-down-payment products, and they worked to expand the use of credit scores and automated underwriting in evaluating the creditworthiness of loan applicants. These major trends reflect changes in the GSEs' underwriting that have impacted affordable lending. Through these trends, Fannie Mae and Freddie Mac have attempted to increase their capacity to serve low- and moderate-income homebuyers.

This section summarizes recent initiatives undertaken by the GSEs and others in the industry to expand affordable housing. The end of this section will present evidence that these new industry initiatives are working, as increased mortgage credit has been flowing to low-income and minority families. The following section will continue the affordable lending theme by examining the performance of different market sectors (e.g., depositories, GSEs, etc.) in funding loans for low-income and minority families. That section will also discuss the important role that FHA plays in making affordable housing available to historically underserved groups as well as the continuing concern that participants in the conventional market could be doing even more to help underserved families.

a. Lowering Down Payments and Up-Front Costs

Numerous studies have concluded that saving enough cash for a down payment and for up-front closing costs is the greatest barrier that low-income and minority families face when considering homeownership.91 To assist in overcoming this barrier, the industry (including lenders, private mortgage insurers and the GSEs) began offering in 1994 mortgage products that required down payments of only 3 percent, plus points and closing costs. Other industry efforts to reduce borrowers' up-front costs included zero-point-interest-rate mortgages and monthly insurance premiums with no up front component. These new plans eliminated large up-front points and premiums normally required at closing.

During 1998, Fannie Mae introduced its "Flexible 97" and Freddie Mac introduced its "Alt 97" low down payment lending programs. Under these programs, borrowers were required to put down only 3 percent of the purchase price. The down payment, as well as closing costs, could be obtained from a variety of sources, including gifts, grants or loans from a family member, the government, a non-profit agency and loans secured by life insurance policies, retirement accounts or other assets. Fannie Mae continues to offer the "Flexible" line of products, and Freddie Mac continues to list "Alt 97."

In 2000, Fannie Mae launched the "MyCommunityMortgage" suite of products, which provides high loan-to-value product options for low- and moderate-income borrowers. In 2002, Fannie Mae purchased or securitized more than \$882.5 million of MyCommunityMortgage products, which helped provide affordable housing solutions for 7,866 households. In addition, Fannie Mae created new tailored solutions to MyCommunityMortgage including a rural housing program, a "Community Solutions" program offering flexible income requirements consistent with targeted professions and an "Energy Efficient Mortgage" program.92

Fannie Mae also expanded its "Flexible" product line with the "Flexible 100" product, which eliminates the requirement for a down payment by providing 100 percent loan-to-value financing. The borrower is required to make at least a three percent contribution to closing costs; the funds for the contribution may come from a variety on sources such as gifts, grants, or unsecured loans from relatives, employers, public agencies, or nonprofits. Lenders delivered 17,206 "Flexible 100" loans to Fannie Mae totaling \$2.2 billion in 2001.93

In 2001, Fannie Mae launched the *eZ Access*TM product pilot. This product is targeted to 11 underserved markets and allows lenders to qualify borrowers who may have less than perfect credit and limited available funds for down payment. Through December 2002, *eZ Access* helped 400 underserved families through Fannie Mae's purchase of \$57.1 million in loans.⁹⁴

In 2000, Freddie Mac introduced its "Freddie Mac 100" product, which is designed to assist borrowers who have good credit but lack the ability to provide a large down payment. "Freddie Mac 100" allows a 100 percent loan-to-value ratio with the condition that the borrower has the funds for closing costs. Another Freddie Mac product, "Affordable Gold 100" provides 100 percent financing to low- and moderate-income borrowers for the purchase price of a home in California. "Affordable Gold 100" combines mortgage insurance benefits provided by a state insurance fund, the secondary mortgage market, and a team of the nation's leading mortgage lenders.95

b. Partnerships—Fannie Mae

In addition to developing new affordable products, lenders and the GSEs have been entering into partnerships with local governments and nonprofit organizations to increase mortgage access to underserved borrowers. Fannie Mae's partnership offices in 54 central cities, which coordinate Fannie Mae's programs with local lenders and affordable housing groups, are an example of this initiative.

Fannie Mae continues to reach out to national groups and work with local affiliates

⁸⁸ The source of the GSE data for 2001 and earlier years is the Office of Federal Housing Enterprise Oversight (OFHEO), *Report to Congress*, 2002 (see Tables 1 and 11). The 2002 data are taken from "Fannie and Freddie Roll to Nearly \$1.5 Trillion in New Business, Portfolios Continue Growing" in *Inside Mortgage Finance*, January 31, 2003, pages 6–7. It should be noted that the *Inside Mortgage Finance* data for 2001 was 13 percent higher than the OFHEO data for 2001; therefore, the 2002 data may be overstated.

⁸⁹ Office of Federal Housing Enterprise Oversight. "Mortgage Markets and The Enterprises in 2001," August 2002, p. 13

⁹⁰ Mortgage market projections from the MBA's MBA Mortgage Finance Forecast, December 17, 2003. 2000 and 2001 numbers from the MBA's MBA Mortgage Finance Forecast, January 10, 2002.

⁹¹ See Charles, K. K. and E. Hurst (2002). "The Transition to Home Ownership and the Black-White Wealth Gap." The Review of Economics and Statistics, 84(2): 281–297; Mayer, C. and G. Engelhardt (1996). "Gift Down Payments and Housing Affordability." Journal of Housing Research, 7(1): 59–77; and Quercia, R. G., G. W. McCarthy, et al. (2003). "The Impacts of Affordable Lending Efforts on Homeownership Rates." Journal of Housing Economics, 12(1): 29–59.

 $^{^{92}\,\}textsc{Fannie}$ Mae, 2002 Annual Housing Activities Report, 2003, pp. 8–9.

⁹³ Fannie Mae, *2001 Annual Housing Activities Report*, 2002, pp. 5–7.

⁹⁴ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, p. 8.

 $^{^{95}\,\}mathrm{Freddie}$ Mac, 2002 Annual Housing Activities Report, 2003, p.57.

to expand homeownership. In 2002, Fannie Mae enhanced 5 partnerships with national organizations and maintained 13 national partnership agreements. For example, Fannie Mae maintains a partnership with the National Urban League (NUL) and the Chase Manhattan Mortgage Corporation to increase NUL's homeownership counseling capacity by providing the necessary technology and tools to support the effort, and to purchase \$50 million in mortgage products over five years that are specifically targeted to African Americans and other minorities in underserved areas. In 2002, NUL originated \$20 million in loans. Another example is Fannie Mae's partnership with the AFL-CIO Housing Investment Trust (HIT) and Countrywide Mortgage, which launched "HIT HOME" in 2001. HIT HOME is an affordable home mortgage initiative that targets 13 million union members in 16 cities throughout the nation to provide union members with a variety of affordable mortgage choices that enable them to qualify for competitively priced loans with new repayment terms. As of December 2002, over \$244 million in loans have been originated through this initiative, serving 2,076 households.96

In order to meet the needs of underserved and low- and moderate-income populations, Fannie Mae has targeted specific populations for initiatives. These include minority and women-owned lenders (MWOL), Native Americans, working Americans, and borrowers served by community development financial institutions and public housing agencies. In 2002, through the MWOL Initiative, Fannie Mae purchased \$9 billion in mortgages originated by MWOLs; 97% of this amount reached minority households. The Employer Assisted Housing Initiative reached 116 employers in 2002 in industries ranging from health care to education. The Community Development Financial Institutions Initiative committed to invest \$17.1 million in 2002, which was expected to generate more than 980 additional units of affordable housing. The Section 8 Homeownership Initiative helped 35 families make the transition from Section 8 rental housing to homeownership in 2002. The Native American Initiative has served more than 3,376 Native American families living on reservations and trust lands since its inception, while providing \$290 million in mortgage financing.97

Fannie Mae's American Dream Commitment's Opportunity for All Strategy and National Minority Homeownership Initiative has pledged to contribute at least \$700 billion in private capital to serve 4.6 million families towards President George W. Bush's goal of expanding homeownership to 5.5 million new minority Americans by the end of the decade. 98 This marks a 66% increase in Fannie Mae's earlier commitment of \$420 billion. Towards this goal, in 2002, Fannie Mae announced 10 new lender

partnerships, bringing the total number of lenders committed since 2000 to 16, with an estimated \$180 billion of American Dream Commitment business pledged to be delivered. Examples of lender partnerships under this initiative include J.P. Morgan Chase & Co. with a \$35 billion national investment initiative designed to increase homeownership opportunities for underserved communities and improve affordable homeownership options for immigrants and minorities, and Bank One with a \$12.5 billion community lending alliance to help low- and moderate-income families purchase homes with a total designated commitment of at least 25% toward increasing homeownership among minorities.99

Through these partnerships, a strategic effort was made to eliminate language, credit, and other barriers to minority homeownership and to reach underserved communities. In 2002, Fannie Mae helped serve 984,276 minority families by providing \$136.2 billion in mortgage financing. 100 According to Fannie Mae, its lending partners realize that multicultural markets may differ from traditional markets, and thus they offer various flexible mortgage products to reach out to minority and immigrant homebuyers. Some of these mortgage products require only a \$500 contribution from the borrower for closing costs. Others have flexible qualifying guidelines that use alternative sources of income like rent and part-time employment.101

c. Partnerships—Freddie Mac

Freddie Mac does not have a partnership office structure similar to Fannie Mae's, but it has undertaken a number of initiatives in specific metropolitan areas. 102 In 2001. Freddie Mac joined the Congressional Black Caucus to launch a new initiative, "With Ownership Wealth," designed to increase African-American homeownership with one million new families by 2005; Freddie Mac has pledged to purchase qualified mortgages originated under this initiative. 103 In 2002, Freddie Mac launched more than 30 new alliances and initiatives and continued working with existing alliances. 104 Freddie Mac has partnered with the National Council of La Raza (NCLR), 20 community based NCLR affiliated housing counseling organizations, the National Association of Hispanic Real Estate Professionals (NAHREP), EMT Applications and participating Freddie Mac Seller/Servicers including Bank of America, U.S. Bank and Wells Fargo Home Mortgage on the "En Su Casa" initiative. This \$200 million homeownership initiative combines technology tools with flexible mortgage

products to meet the needs of Hispanic borrowers. Mortgage products include low down payments, flexible credit underwriting and debt-to-income ratios, and streamlined processing for resident alien borrowers.¹⁰⁵

In 2002, Freddie Mac joined with the City of Boston and the U.S. Conference of Mayors to make available the "Don't Borrow Trouble" predatory lending educational campaign to approximately 1,100 cities. In addition, Freddie Mac joined with Rainbow/ PUSH and the National Urban League to promote the "CreditSmartSM" financial educational curriculum that helps consumers understand, obtain and maintain good credit, thereby preparing them for homeownership and other personal financial goals. In 2002, Freddie Mac also joined with the American Community Bankers and the Credit Union National Association in strategic alliances that will better enable member banks and credit unions access to the secondary market.106

In June 2002, President George W. Bush challenged the nation's housing industry to invest more than \$1 trillion to make homeownership a reality for 5.5 million more minority households for the decade. Freddie Mac responded to the challenge with "Catch the Dream," which is a comprehensive set of 25 major initiatives aimed at accelerating the growth in minority homeownership. The initiatives range from homebuyer education and outreach to new technologies with innovative mortgage products. Catch the Dream represents a collaborative effort with lenders, nonprofit housing and communitybased organizations, and other industry participants to expand homeownership opportunities for America's minorities. 107 Freddie Mac has committed to providing \$400 billion in mortgage financing for minority families by the end of the decade. 108 In 2002, Freddie Mac purchased mortgages for 576,000 minority families, a total of 17.3% of their single-family, owner-occupied mortgage purchases for the year. 109 In addition, in 2002, minority- or womenowned lenders comprised 2.7% of Freddie Mac's network of lenders. \$5.5 billion in loans were purchased from these lenders, financing housing for 45,000 families. 110

The programs mentioned above are examples of the partnership efforts undertaken by the GSEs. There are more partnership programs than can be adequately described here. Fuller descriptions of these programs are provided in their Annual Housing Activity Reports.

⁹⁶ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, pp. 12–15.

⁹⁷ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, pp. 16–18.

⁹⁸ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, p. 15.

⁹⁹ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, pp. 15–16.

¹⁰⁰ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, p 5.

 $^{^{101}}$ Fannie Mae, "Minority Homeownership," 2002.

¹⁰² Freddie Mac, *News Release*, January 15, 1999. ¹⁰³ Freddie Mac, 2002, pp. 41–42, and Freddie Mac, *2002 Annual Housing Activities Report*, 2003, p. 62.

¹⁰⁴ Freddie Mac, 2002 Annual Housing Activities Report, 2003, p. 60.

¹⁰⁵ Freddie Mac, *2002 Annual Housing Activities Report*, 2003, p. 61.

¹⁰⁶Freddie Mac, 2002 Annual Housing Activities Report, 2003, pp. 35–38.

¹⁰⁷ Freddie Mac. Corporate Information. "Our Homeownership Commitment." http://www.freddiemac.com/corporate/about/dream/expanding minority homeownership.htm.

¹⁰⁸ Freddie Mac, 2002 Annual Housing Activities Report, 2003, p. 28.

¹⁰⁹ Freddie Mac, *2002 Annual Housing Activities Report*, 2003, p. 32.

 $^{^{110}\,\}mathrm{Freddie}$ Mac, 2002 Annual Housing Activities Report, 2003, p. 15.

d. Underwriting and GSE Purchase Guidelines

Lenders, mortgage insurers, and the GSEs have also been modifying their mortgage underwriting standards to address the needs of families who have historically found it difficult to qualify under traditional guidelines. In addition to the changes in underwriting standards, the use of automated underwriting has dramatically transformed the mortgage application process. This section focuses on changes to traditional underwriting standards and recent GSE initiatives for credit-impaired borrowers. Subsequent sections will provide more details on the impact of automated underwriting.

The GSEs modified their underwriting standards to address the needs of families who find qualifying under traditional guidelines difficult. The goal of these underwriting changes is not to loosen underwriting standards, but rather to identify creditworthiness by alternative means that more appropriately measures the unique circumstances of low-income, immigrant, and minority households. Examples of changes that the GSEs and others in the industry have made to their underwriting standards include the following:

• Using a stable income standard rather than a stable job standard (or minimum period of employment). This particularly benefits low-skilled applicants who have successfully remained employed, even with frequent job changes.

• Using an applicant's history of rent and utility payments as a measure of creditworthiness. This measure benefits lower-income applicants who have not established a credit history.

• Allowing pooling of funds for qualification purposes. This change benefits applicants with extended family members. Freddie Mac, for example, allows income from relatives who live together to pool their funds to cover downpayment and closing costs and to combine their incomes for use in calculating the borrower's stable monthly income.

These underwriting changes have been accompanied by homeownership counseling to ensure homeowners are ready for the responsibilities of homeownership. In addition, the industry has engaged in intensive loss mitigation to control risks.

In 1999, HUD commissioned a study by the Urban Institute to examine the underwriting criteria that the GSEs use when purchasing mortgages from primary lenders. ¹¹¹
According to the study, while the GSEs had improved their ability to serve low- and moderate-income borrowers, it did not appear at that time that they had gone as far as some primary lenders to serve these borrowers. From the Urban Institute's discussion with lenders, it was found that primary lenders were originating mortgages to lower-income borrowers using

underwriting guidelines that allow lower down payments, higher debt-to-income ratios and poorer credit histories than allowed by the GSEs' guidelines.

From this and other evidence, the Urban Institute concluded that the GSEs were lagging the market in servicing low- and moderate-income and minority borrowers. Furthermore, the Urban Institute found "that the GSEs" efforts to increase underwriting flexibility and outreach has been noticed and is applauded by lenders and community advocates. Despite the GSEs' efforts in recent years to review and revise their underwriting criteria, however, they could do more to serve low- and moderate-income borrowers and to minimize disproportionate effects on minorities."112 Since the Urban Institute study, Freddie Mac and Fannie Mae have been playing a larger role in financing lowincome and minority borrowers. (See Section E.2.)

In addition to offering low-down-payment programs, the GSEs' recent efforts have also centered around their automated underwriting systems and their treatment of borrowers with blemished credit, the latter being perhaps the most controversial underwriting issue over the past few years. Freddie Mac recently launched a variety of new products aimed at providing borrowers with impaired credit more mortgage product choices. The new products include: "CreditWorks," which helps borrowers with excessive debt and impaired credit to qualify for a prime market rate mortgage more quickly than before, and "LeasePurchase Plus Initiative," which provides closing cost and down payment assistance in addition to extensive counseling for borrowers who have had bad credit or who have never established a credit history. 113 During 2002, Freddie Mac entered into several new markets under the "LeasePurchase Plus Initiative" and purchased more than \$16 million in loans.114

According to Freddie Mac, its automated underwriting system, "Loan Prospector" has reduced costs, made approving mortgages easier and faster, and increased the consistency of the application of objective underwriting criteria. In addition, Freddie Mac states that "Loan Prospector" extends the benefits of the mortgage finance system to borrowers with less traditional credit profiles and limited savings by more accurately measuring risk. Freddie Mac reports that its automated underwriting system, Loan Prospector, has resulted in higher approval rates for minority borrowers than under traditional manual underwriting because of improved predictive powers. As mentioned in Section C.7, the 2000 version of LP approved 87.1 percent of loans generated through affordable housing programs, compared to 51.6 percent approved by manual underwriting. The Freddie Mac study found automated mortgage scoring less discriminatory and more accurate in predicting risk. However, as noted below in the automated mortgage

scoring section, there are concerns that the codification of certain underwriting guidelines could result in unintentional discrimination or disparate treatment across groups. In response to the potential disparate impact of automated underwriting, Freddie Mac have launched initiatives to make the mortgage process more transparent by disclosing both credit and non-credit factors that Loan Prospector consider when evaluating a loan application. In 2000, Freddie Mac launched an initiative that published a list of all of the factors that Loan Prospector uses to analyze loans, and put the list on the Freddie Mac Web site. 115

In 2002, Fannie Mae released two versions of its automated underwriting service, "Desktop Underwriter" (DU), to expand its mortgage product offerings and to update underwriting guidelines. These enhancements-labeled DU 5.2 and DU 5.2.1—increased homeownership opportunities for low- and moderate-income borrowers and borrowers with small downpayments by enhancing DU's risk assessment capabilities for certain high loanto-value loans. For example, DU 5.2.1 enhanced its Expanded ApprovalTM policies to allow 100 percent loan-to-value limited cash-out refinances and the origination of 5/ 1 ARMs.¹¹⁶ The Expanded Approval feature and Timely Payment Rewards option in DU were created by Fannie Mae in 1999 to enable lenders to more comprehensively review a borrower's creditworthiness. The Timely Payment Rewards option reduces the interest rate of qualified borrowers of up to one percent after making timely mortgage payments for a given time period.117 With these options, lenders can offer mortgage loans to many borrowers previously unable to receive financing from a mainstream lender. A borrower who is recommended for approval for either of these features would be eligible for an initial mortgage rate that is lower than that available through the subprime market.118 Automated mortgage scoring and the potential for disparate impacts on borrowers will be further discussed in a later section.

5. Affordable Single-Family Lending: Data Trends

a. 1993-2002 Lending Trends

HMDA data suggest that the industry and GSE initiatives are increasing the flow of credit to underserved borrowers. Between 1993 and 2002, conventional loans to low-income and minority families increased at much faster rates than loans to higher income and non-minority families. As shown below, conventional home purchase originations to African Americans more than doubled between 1993 and 2002 and those to Hispanic borrowers more than tripled. Home loans to low-income borrowers and to low-income and high-minority census tracts also more than doubled during this period.

¹¹¹ Kenneth Temkin, Roberto Quercia, George Galster, and Sheila O' Leary, A Study of the GSEs' Single Family Underwriting Guidelines: Final Report. Washington DC: U.S. Department of Housing and Urban Development, April 1999.

¹¹² Temkin, et al. 1999, p. 28.

¹¹³ Freddie Mac, *2001 Annual Housing Activities Report*, 2002, p. 28.

¹¹⁴ Freddie Mac, *2002 Annual Housing Activities Report*, 2003, p. 35.

¹¹⁵ Ibid. p. 57.

 $^{^{116}}$ Fannie Mae, 2002 Annual Housing Activities Report, 2003, p. 10.

¹¹⁷ *Ibid.* p. 6.

¹¹⁸ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, p. 32.

	1993–2002 Growth rate: all home loans P (per cent)	1993–2002 Growth rate: conventional home loans P (per cent)
African-American Borrowers Hispanic Borrowers	80 186	133 245
White Borrowers	30	43
Low-Income Borrower (Less than 80% of AMI)	91	119
Upper-Income Borrower (More than 120% of AMI)	66	81
Low-Income Census Tract	99	143
Upper-Income Census Tract	64	78
High-Minority Tract (50% or more minority)	113	167
Predominantly-White Tract (Less than 10% minority)	53	64

GSE purchases showed similar trends, as indicated by the following 1993–to–2002 percentage point increases for metropolitan areas: African-American borrowers (193 percent), Hispanic borrowers (208 percent), and low-income borrowers (193 percent). While their annual purchases of all home loans increased by 57 percent between 1993 and 2001, their purchases of mortgages that qualify for the three housing goals increased as follows: Special affordable by 264 percent; low- and moderate-income by 142 percent; and underserved areas by 112 percent.

While low interest rates and economic expansion certainly played an important role in the substantial increase in conventional affordable lending in recent years, most observers believe that the efforts of lenders, private mortgage insurers, and the GSEs were also important contributors. In addition, many observers believe that government

initiatives such as the GSE housing goals and the Community Reinvestment Act have also played a role in the growth of affordable lending over the past 10 years.

b. Affordable Lending Shares by Major Market Sector

Section E below compares the GSEs' performance with the performance of primary lenders in the conventional conforming market. To provide a useful context for that analysis, this section examines the role of the conventional conforming market in funding low-income and minority families and their neighborhoods. Information on the mortgage market's funding of homes purchased by first-time homebuyers is also provided. In addition, this section compares the GSEs with other sectors of the mortgage market. The important role of FHA in the affordable

lending market is highlighted and questions are raised about whether the conventional conforming market could be doing a better job helping low-income and minority borrowers obtain access to mortgage credit.

Table A.1 reports borrower characteristics and Table A.2 reports neighborhood characteristics for home purchase mortgages insured by FHA, purchased by the GSEs, originated by depository institutions (mainly banks and thrift), and originated in the conventional conforming market and in the total market for owner-occupied properties in metropolitan areas. ¹¹⁹ In this case, the "total" market consists of both the conventional conforming market and the government (mainly FHA and VA loans) market; "jumbo" loans above the conventional conforming loan limit are excluded from this analysis. ¹²⁰ BILLING CODE 4210–22–P

¹¹⁹ Table A.3 also provides the same average (1999 to 2002) information as Tables A.1 and A.2 but for total (both home purchase and refinance)

¹²⁰The "Total Market" is defined as all loans (including both government and conventional)

Table A.1

Borrower Characteristics for Major Sectors of the Mortgage Market in Metropolitan Areas
Home Purchase Mortgages, 1996-2002

			Conventional Conforming Market						
						Depos	itories	Conforn	ning Market
Borrower Characteristics	Total Market	FHA	Freddie Mac	Fannie Mae	Both GSEs	Total	Portfolio	Total	W/O B&C 2
Low-Income:									
1999	34.4 %	49.5 % 1	25.1 %	24.7 %	24.8 %	29.2 %	28.5 %	30.1 %	29.8 %
2000	33.8	48.7	27.8	25.4	26.4	29.7	28.7	29.8	29.5
2001	33.0	50.7	26.8	27.9	27.4	28.2	29.2	28.3	28.1
2002	34.0	54.2	28.6	29.7	29.2	29.8	30.5	29.7	29.6
1999-2002 Average	33.8	50.7	27.2	27.1	27.1	29.2	29.2	29.5	29.3
1996-2002 Average	33.0	49.3	24.8	25.8	25.4	28.1	28.9	28.7	28.5
African American:									
1999	7.9	14.6	3.5	3.4	3.5	4.7	4.7	5.4	5.0
2000	8.3	15.5	4.3	4.2	4.3	5.4	5.0	5.9	5.4
2001	7.6	14.0	3.9	5.2	4.6	4.8	4.9	5.4	5.0
2002	7.5	13.9	3.5	5.4	4.7	4.9	4.8	5.8	5.3
1999-2002 Average	7.8	14.5	3.8	4.6	4.3	5.0	4.9	5.6	5.2
1996-2002 Average	7.7	14.4	3.6	4.4	4.1	4.7	4.8	5.4	5.0
Hispanic:									
1999	9.7	19.3	5.5	6.0	5.8	6.5	6.6	7.1	6.9
2000	10.9	20.7	6.6	8.0	7.4	7.9	7.7	8.3	8.1
2001	11.3	20.3	7.0	8.5	7.9	8.5	9.4	9.0	8.7
2002	12.2	20.6	6.6	10.4	9.0	9.3	9.2	10.4	9.9
1999-2002 Average	11.0	20.2	6.5	8.4	7.6	8.1	8.2	8.7	8.5
1996-2002 Average	10.1	19.2	5.9	7.6	6.9	7.0	7.0	7.7	7.5
Minority:									
1999	23.4	37.7	15.0	17.4	16.4	17.7	17.3	19.0	18.4
2000	25.4	40.2	17.6	20.2	19.0	20.4	19.6	21.2	20.5
2001	25.1	38.0	18.3	21.9	20.3	20.3	21.4	21.5	20.8
2002	26.8	38.5	18.9	24.9	22.7	22.1	21.3	24.2	23.2
1999-2002 Average	25.2	38.6	17.5	21.4	19.8	20.2	19.9	21.5	20.7
1996-2002 Average	23.5	37.3	16.0	19.8	18.3	18.2	17.7	19.6	18.9

Notes: The "1999-2002 Average" is a loan-based weighted average. All the data are for home purchase mortgages. The FHA, depositories, and market percentages are derived from HMDA data (various years). The GSE percentages are derived from the loan-level data that Fannie Mae and Freddie Mac provide to HUD. The GSE data include conventional home loans purchased during 1999, 2000, 2001 and 2002; thus, these data include their purchases of seasoned loans (i.e., mortgages originated prior to 1999 or 2000 or 2001 or 2002) as well as their purchases of mortgages originated during 1999, 2000, 2001 and 2002. The "Total Market" combines the government sector (FHA and VA loans) and the conventional conforming market. Thus, it includes all loans except "jumbo" loans above the conforming loan limit which was \$300,700 in 2002. "Total Depositories" data are loans originated by HMDA reporters regulated by FDIC, OTS, OCC, FRB, and The National Credit Union Administration; they consist mainly of banks, thrifts, and their subsidieries. The "Portfolio Depositories" data refer to new originations that are not sold by banks and thrift institutions during 1999-2002 and thus are retained in depository portfolios. The HMDA data for low-income borrowers exclude mortgages with a loan-to-borrower-income ratio greater than six.

¹ Each percentage represents the share of a sector's portfolio accounted for by the borrower or neighborhood characteristic based on a "distribution of business" approach or explained in the text. For example, 49.5 percent of FHA-insured home loans were loans for low-income borrowers.

² HMDA-based market shares that have been adjusted to exclude the B&C portion of the subprime market. It should be recognized that there exists some uncertainty regarding the number of B&C loans in the HMDA data. The adjustment assumes that the B&C loans represent one-half of the subprime market. The adjustment for home purchase loans is small because subprime (B&C) loans are mainly refinance loans.

able A.2

Neighborhood Characteristics for Major Sectors of the Mortgage Market in Metropolitan Areas Home Purchase Mortgages, 1996-2002

					Conventional Conforming Market	Conforming	, Market		
						Depo	Depositories	Confor	Conforming Market
Neighborhood Characteristics	Total Market	FHA	Freddie Mac	Fannie Mae	Both GSEs	Total	Portfolio	Total	W/OB&C2
Low-Income Tract:									
1999	12.7	18.2	8.3	7.9	8.1	10.8	11.6	11.3	10.9
2000	13.4	19.2	9.0	9.5	9.3	6.11	12.4	12.0	11.5
2001	12.5	18.2	9.4	10.1	8.6	11.0	12.3	11.0	10.7
2002	12.7	18.8	11.3	0.11	11.1	11.1	12.1	11.5	11.1
1999-2002 Average	12.8	18.6	9.6	8.6	9.7	11.2	12.1	11.4	11.1
1996-2002 Average	12.7	18.7	8.9	9.5	9.3	10.8	12.0	11.2	10.9
High-Minority Tract:									
1999	17.5	26.0	12.3	12.8	12.6	13.9	13.5	15.1	14.6
2000	18.5	26.5	12.8	15.3	14.2	15.7	14.9	16.4	15.7
2001	17.7	24.3	13.2	15.6	14.6	15.2	16.0	16.0	15.4
2002	18.6	24.0	16.2	17.3	16.9	191	15.5	17.5	16.7
1999-2002 Average	18.1	25.2	13.7	15.4	14.7	15.3	15.0	16.3	15.7
1996-2002 Average	17.7	25.9	12.8	15.1	14.2	14.2	13.9	15.4	14.9
High African-American Tract:									
1999	5.7	8.9	3.4	3.0	3.2	4.3	4.4	4.8	4.4
2000	0.9	9.4	3.9	3.7	3.8	5.0	4.8	5.1	4.8
2001	5.4	8.5	3.9	4.4	4.2	4.4	4.7	4.6	4.3
2002	5.5	8.4	5.3	4.7	4.9	4.6	4.8	4.9	4.6
1999-2002 Average	5.7	8.8	4.2	4.0	4.1	4.6	4.7	4.8	4.5
1996-2002 Average	5.7	9.1	3.8	4.0	3.9	4.4	4.6	4.7	4.5
Underserved Areas:			ć		Č	Š	i	c c	ć (
1999	T.67	40.5	6.02	70.7	9.07	74.0	73.0	8.07	7.67
2000	30.3	42.1	22.0	23.4	22.8	26.7	27.1	27.1	26.4
2001	28.9	40.3	22.3	24.4	23.5	25.4	27.2	25.8	25.2
2002	29.7	40.9	25.8	26.7	26.3	26.2	27.2	27.2	26.4
1999-2002 Average	29.5	40.9	22.9	24.0	23.5	25.7	26.8	26.5	25.8
1996-2002 Average	29.2	41.0	21.7	23.5	22.8	24.9	26.4	25.9	25.4

See notes to Table A.1.

Table A.3

Borrower and Neighborhood Characteristics for Major Sectors of the Mortgage Market in Metropolitan Areas Home Purchase and Refinance Mortgages, 1999-2002

				C	onventional Con	Conventional Conforming Market		
							Conform	Conforming Market
Borrower Characteristics	Total Market	FHA	Freddie Mac	Fannie Mae	Both GSEs	Depositories	Total	W/O B&C ²
Low-Income;	31.6 %	50.0 %	25.9 %	26.2 %	26.1 %	28.1 %	28.8 %	28.1 %
African American:	7.1	14.8	3.5	4.0	3.8	4.9	5.7	5.0
Hispanic:	9.2	19.5	5.7	7.4	6.7	7.0	7.7	7.5
Minority:	22.2	38.0	16.7	18.8	17.9	18.3	19.8	19.0
Neighborhood Characteristics								
Low-Income Tract:	12.2	17.9	9.3	9.5	9.4	10.9	11.5	10.9
High-Minority Tract:	17.6	25.5	13.9	15.3	14.7	15.1	16.6	15.7
High African-American Tract:	5.9	9.1	4.1	3.9	4.0	4.9	5.5	4.9
Underserved Areas:	28.4	40.4	23.1	23.8	23.5	25.4	26.7	25.7

market. Thus, it includes all loans except "jumbo" loans above the conforming loan limit which was \$300,700 in 2002. "Depositories" data are loans originated these data include their purchases of seasoned loans (i.e., mortgages originated prior to 1999 or 2000 or 2001 or 2002) as well as their purchases of mortgages and market percentages are derived from 1999, 2000, 2001 and 2002 HMDA data (various years). The GSE percentages are derived from the loan-level data originated during 1999, 2000, 2001 and 2002. The "Total Market" combines the government sector (FHA and VA loans) and the conventional conforming Notes: The "1999-2002 Average" is a loan-based weighted average. All the data are for home purchase and refinance mortgages. The FHA, depositories, by HMDA reporters regulated by FDIC, OTS, OCC, FRB, and The National Credit Union Administration; they consist mainly of banks, thrifts, and their that Fannie Mae and Freddie Mac provide to HUD. The GSE data include conventional home loans purchased during 1999, 2000, 2001 and 2002; thus, subsidieries. The HMDA data for low-income borrowers exclude mortgages with a loan-to-borrower-income ratio greater than six.

Each percentage represents the share of a sector's portfolio accounted for by the borrower or neighborhood characteristic based on "distribution of business" approach or explained in the text. For example, 50.0 percent of FHA-insured home loans between 1999 and 2002 were loans for low-income borrowers. It should be noted that due to FHA's streamline refinance program, borrower income data were not available for almost 70 percent of FHA's refinance loans.

uncertainty regarding the number of B&C loans in the HMDA data. The adjustment assumes that the B&C loans represent one-half of the subprime market. ² HMDA-based market shares that have been adjusted to exclude the B&C portion of the subprime market. It should be recognized that there exists some

HMDA is the source of the FHA, depository, and market data, while the GSEs provide their own data. Low-income, African-American, Hispanic, and minority borrowers are covered in Table A.1. Table A.2 provides information on four types of neighborhoods-low-income census tracts, tracts where minorities (or African Americans) account for more than 30 percent of the census tract population, and underserved areas as defined by HUD. The average data reported in Tables A.1 and A.2 for the years 1999 to 2002 offer a good summary of recent lending to low-income and minority borrowers and their communities. 121 Individual year data are also

The focus of different market sectors on affordable lending is summarized by the percentages reported in Tables A.1 and A.2. These percentages show each sector's "distribution of business," defined as the share of loans originated (or, for the GSEs, purchased) that had a particular borrower or neighborhood characteristic. The interpretation of the "distribution of business" percentages can be illustrated using the FHA percentage for low-income borrowers: Between 1999 and 2002, 50.7 of all FHA-insured home purchase loans in metropolitan areas were originated for borrowers with an income less than 80 percent of the local area median income. These percentages are to be contrasted with "market share" percentages, which are presented below in Section E. A "market share" percentage is the share of loans with a particular borrower or neighborhood characteristic that was funded by a particular market sector (e.g., FHA-insured, GSEs, depositories). As will discussed below, FHA's "market share" for low-income borrowers during the 1999-to-2002 period was estimated to be 26 percent which is interpreted as follows: Of all home purchase loans originated for low-income borrowers in metropolitan areas between 1999 and 2002, 26 percent were FHA-insured loans. Thus, in this example, the "distribution of business" percentage measures the importance (or concentration) of low-income borrowers in FHA's overall business while the "market share" percentage measures the importance of FHA to the market's overall funding of loans for low-income borrowers. Both concepts are important for evaluating performance—for an industry sector such as FHA or the GSEs to have a significant impact on lending to a targeted group, that sector's business must be concentrated on the targeted group and that sector must be of some size. The discussion below will focus on the degree to which different mortgage sectors concentrate on targeted groups, while Section E will also provide estimates of market shares.

The main insights from the "distribution of business" percentages in Tables A.1 and A.2 pertain to four topics.

(i) FHA-Insured Loans. FHA has traditionally been the mechanism used by borrowers who face difficulty obtaining mortgage financing in the private conventional market. FHA has long been recognized as the major source of funding for first-time, low-income and minority homebuyers who are not often able to raise cash for large downpayments. 122 Tables A.1 and A.2 show that FHA places much more emphasis on affordable lending than the other market sectors. Between 1999 and 2002, low-income borrowers accounted for 50.7 percent of FHA-insured loans, compared with 27.1 percent of the home loans purchased by the GSEs, 29.2 percent of home loans originated by depositories, and 29.5 percent of all originations in the conventional conforming market (see Table A.1). Likewise, 40.9 percent of FHA-insured loans were originated in underserved census tracts, while only 23.5 percent of the GSEpurchased loans, 25.7 percent of home loans originated by depositories, and 26.5 percent of conventional conforming loans were originated in these tracts (see Table A.2). 123 As discussed in Section E, FHA's share of the minority lending market is particularly high. While FHA insured only 18 percent of all home purchase mortgages originated below the conforming loan limit in metropolitan areas between 1999 and 2002, it is estimated that FHA insured 33 percent of all home loans originated for African-American and Hispanic borrowers.

(ii) Conventional and GSE Minority Lending. The affordable lending shares for the conventional conforming sector are low for minority borrowers, particularly African-American and Hispanic borrowers. These borrowers accounted for only 14.3 percent of all conventional conforming loans originated between 1999 and 2002, compared with 34.7 percent of FHA-insured loans and 18.8 percent of all loans originated in the total (government and conventional conforming) market. Not surprisingly, the minority lending performance of conventional lenders has been subject to much criticism. Recent studies contend that primary lenders in the conventional market are not doing their fair share of minority lending which forces minorities, particularly African-American and Hispanic borrowers, to rely on more costly FHA and subprime loans. 124 Thus, it appears that conventional lenders could be doing a better job helping minority borrowers obtain access to mortgage credit.

· The GSEs' funding of minority loans can be compared with mortgages originated for minority borrowers in the conventional conforming market, although the latter may be a poor benchmark, as discussed above. Between 1999 and 2002, home purchase loans to African-American and Hispanic borrowers accounted for 10.3 percent of Freddie Mac's purchases, 13.0 percent of Fannie Mae's purchases, and 14.3 percent of loans originated in the conventional conforming market (or 13.7 percent if B&C loans are excluded from the market definition). Thus, since 1999, the African-American and Hispanic share of the GSEs' purchases has been lower than the corresponding share for the conventional conforming market. 125

· As the above comparisons show, Fannie Mae has had a much better record than Freddie Mac in funding loans for minority families. And Fannie Mae significantly increased its purchases of loans for African-American and Hispanic borrowers during 2001, raising the share of its purchases to market levels—13.7 percent for both Fannie Mae and the conforming market (without B&C loans). In 2002, Fannie Mae surpassed the conventional conforming market in funding African-American and Hispanic borrowers—a 15.8 percent share for Fannie Mae and a 15.2 share for the market. When all minority borrowers are considered, Fannie Mae has purchased mortgages for

¹²¹ The affordable market shares reported in Table A.1 for the "Conventional Conforming Market W/O B&C" were derived by excluding the estimated number of B&C loans from the market data reported by HMDA. Because B&C lenders operate mainly in the refinance sector, excluding these loans from the conforming market has litte impact on the home purchase percentages reported in Table A.1. The method for excluding B&C loans is explained in Section E below and Appendix D.

 $^{^{\}rm 122}\,{\rm Almost}$ two-thirds of the borrowers with an FHA-insured home purchase loan make a downpayment less than five percent, and over 80 percent are first-time home buyers. For discussions of the role of FHA in the mortgage market, see (a) Harold L. Bunce, Charles A. Capone, Sue G. Neal, William J. Reeder, Randall M. Scheessele, and Edward J. Szymanoski, An Analysis of FHA's Single-Family Insurance Program, Office of Policy Development and Research, U.S. Department of Housing and Urban Development, 1995; and (b) Office of Policy Development and Research, "FHA's Impact on Homeownership Opportunities for Low-Income and Minority Families During the 1990s' Issue Brief IV, U.S. Department of Housing and Urban Development, December 2000. For data on the credit characteristics of FHA borrowers, see Harold L. Bunce, William J. Reeder and Randall Scheessele, "Understanding Consumer Credit and Mortgage Scoring: A Work in Progress at HUD", U.S. Department of Housing and Urban Development, Unpublished Paper, 1999.

¹²³ FHA, which focuses on low downpayment loans and also accepts borrowers with credit blemishes, experiences higher mortgage defaults than conventional lenders and the GSEs. Still, the FHA system is actuarially sound because it charges an insurance premium that covers the higher default costs. For the results of FHA's actuarial analysis, see Deloitte & Touche, *Actuarial Review of MMI Fund as of FY 2000*, report for the U.S. Department of Housing and Urban Development, January 2001.

 $^{^{\}rm 124}\, See$ Green and Associates, Fair Lending in Montgomery County: A Home Mortgage Lending Study, a report prepared for the Montgomery County Human Relations Commission, March 1998; and Calvin Bradford, Crisis in Dé jà vu: A Profile of the Racial Patterns in Home Purchase Lending in the Baltimore Market. Report for The Public Justice Center, May 2000; and The Patterns of GSE Participation in Minority and Racially Changing Markets Reviewed from the Context of Levels of Distress Associated with High Levels of FHA Lending, GSE Study No. 11, U.S. Department of Housing and Urban Development, September 2000. For analysis suggesting some minorities receiving FHA loans could qualify for conventional loans, see Anthony Pennington-Cross, Anthony Yezer, and Joseph Nichols, Credit Risk and Mortgage Lending: Who Uses Subprime and Why? Working Paper No. 00-03. Research Institute for Housing America, 2000. Also see the series of recent studies concerning the lack of mainstream lenders in minority neighborhoods.

¹²⁵ For a comprehensive analysis of the GSEs' purchases of minority loans through 1999, see Harold L. Bunce, *An Analysis of GSE Purchases of Mortgages for African-American Borrowers and their Neighborhoods*, Housing Finance Working Paper No. 11, Office of Policy Development and Research, HUD, December 2000.

minority borrowers at a higher rate (years 2001 and 2002) than these loans were originated by primary lenders in the conventional conforming market (without B&C loans). Freddie Mac, on the other hand, lagged behind both the market and Fannie Mae in funding loans for minority borrowers during 2001 and 2002, as well as during the entire 1999-to-2002 period. The share of Freddie Mac's purchases for African-American and Hispanic borrowers declined from 10.9 percent in both 2000 and 2001 to 10.1 percent in 2002.

 Considering the minority census tract data reported in Table A.2, Fannie Mae lagged behind the conforming market (without B&C loans) in high-minority neighborhoods and in high-African-American neighborhoods during the 1999-to-2002 period. However, Fannie Mae improved its mortgage purchases in African-American neighborhoods during 2001 and 2002 to exceed market levels by 0.1 percentage point (e.g., 4.7 percent of Fannie Mae's purchases and 4.6 percent of market originations were in high African-American tracts in 2002). And during 2001 and 2002, Fannie Mae also purchased loans in high-minority census tracts at a higher rate than loans were originated by conventional lenders in these tracts. While Freddie Mac has generally lagged the primary market in funding minority neighborhoods, note in Table A.2 that high African-American tracts increased from 3.9 percent of Freddie Mac's purchases in 2001 to 5.3 percent in 2002, placing Freddie Mac above the conventional conforming market level (4.6 percent) in

(iii) Low-Income Lending by the GSEs. Information is also provided on the GSEs' purchases of home loans for low-income borrowers (A.1) and for families living in low-income neighborhoods (A.2). Historically, the GSEs have lagged behind the conventional conforming market in funding affordable loans for these groups. During the 1999-to-2002 period, low-income borrowers (census tracts) accounted for 27.2 (9.6) percent of Freddie Mac's purchases, 27.1 (9.8) percent of Fannie Mae's purchases, 29.2 (11.1) percent of loans originated by depositories, and 29.3 (11.1) percent of home loans originated by conventional conforming lenders (without B&C loans). By the end of this period, Fannie Mae had significantly improved its performance relative to the market. In 2002, low-income borrowers (census tracts) accounted for 29.7 (11.0) of Fannie Mae's purchases, compared with 29.6 (11.1) percent for the conforming market. It is also interesting that even though Freddie Mac lagged the market in funding home loans for low-income borrowers during 2002 (28.6 percent versus 29.6 percent), it surpassed the market in financing properties in low-income census tracts (11.3 percent versus 11.1 percent). A more complete analysis of the GSEs' recent improvements in purchasing home loans that qualify for the housing goals is provided below in Section E.

(iv) *Depositories*. Within the conventional conforming market, depository institutions (mainly banks and thrifts) are important providers of affordable lending for lower-

income families and their neighborhoods. 126 Between 1999 and 2002, underserved areas accounted for 26.8 percent of loans held in depository portfolios, which compares favorably with the underserved areas percentage (26.5 percent) for the overall conventional conforming market. 127 Depository lenders have extensive knowledge of their communities and direct interactions with their borrowers, which may enable them to introduce flexibility into their underwriting standards without unduly increasing their credit risk. The Community Reinvestment Act provides an incentive for banks and thrifts to initiate affordable lending programs with underwriting flexibility and to reach out to lower income families and their communities. 128 Many of the CRA loans are held in portfolio by lenders, rather than sold to Fannie Mae or Freddie Mac. 129

(v) First-time Homebuyers. As explained in Section E. market information on first-time homebuyers is not as readily available as the HMDA data reported in Tables A.1 and A.2 on the income and racial characteristics of borrowers and census tracts served by the mortgage market. However, the limited market data that are available from the American Housing Survey, combined with the first-time homebuyer data reported by FHA and the GSEs, indicate a rather large variation in the funding of first-time homebuyers across the different sectors of the mortgage market. Based on the American Housing Survey (AHS), it is estimated that first-time homebuyers accounted for 42.3 percent of all home purchase loans originated throughout the market between 1999 and 2001, 130 and for 37.6 percent of home loans

¹²⁶ Tables A.1, A.2, and A.3 include data for all home loans originated by depositories as well as for the subset of loans originated but not sold, the latter being a proxy for loans held in depository portfolios. (*See* the notes to Table A.1 for definitions of the depository data.)

127 However, as shown in Table A.1, depository institutions resemble other conventional lenders in their relatively low level of originating loans for African-American, Hispanic and minority borrowers. Within the conventional conforming market, Fannie Mae has done a better job than depositories in funding minority borrowers, particularly Hispanic borrowers and minority borrowers as a group. During the last two years, Fannie Mae has also funded African-American borrowers at a higher rate than have depository institutions.

128 CRA loans are typically made to low-income borrowers earning less than 80 percent of area median income, and in moderate-income neighborhoods. For a comprehensive analysis of CRA and its impact on affordable lending, see Robert E. Litan, Nicolas P. Retsinas, Eric S. Belsky and Susan White Haag, The Community Reinvestment Act After Financial Modernization: A Baseline Report, U.S. Department of Treasury, 2000.

129 Evidence is growing that CRA-type lending to low-income families can be profitable, particularly when combined with intensive loss mitigation efforts to control credit risk. In a survey conducted by the Federal Reserve, lenders reported that most CRA loans are profitable although not as profitable as the lenders' standard products. See Board of Governors of the Federal Reserve System. The Performance and Profitability of CRA-Related Lending. Washington, DC, 2000.

¹³⁰ In this case, the market includes all government and conventional loans, including jumbo loans.

originated in the conventional conforming market. The AHS defines a first-time homebuyer as someone who has never owned a home. Using a more liberal definition of a first-time homebuyer (someone who has not owned a home in the past three years), FHA reports that first-time homebuyers accounted for 80.5 percent of all home loans that it insured between 1999 and 2001 and the GSEs report that first-time homebuyers accounted for 26.5 percent of the home loans purchased by each GSE during that same period. Given FHA's low downpayment requirements, it is not surprising that FHA focuses on first-time homebuyers. The GSEs, on the other hand, fall at the other end of the continuum, with their first-time homebuyer share (26.5 percent) falling far short of the first-time homebuyer share (37.6 percent) of the conventional conforming market. Section E will include a more detailed comparison of the GSEs and the conventional conforming market in serving first-time homebuyers. In addition, Section E will conduct a market share analysis that examines the funding of minority first-time homebuyers. Consistent with the earlier discussion, that analysis suggests that conventional lenders and the GSEs have played a relatively small role in the market for minority first-time homebuyers. One analysis reported in Section E estimates that mortgage purchases by the GSEs between 1999 and 2001 totaled 41.5 percent of all home loans originated, but they accounted for only 14.3 percent of home loans originated for first-time African-American and Hispanic homebuyers.

c. Community Reinvestment Act

The Community Reinvestment Act (CRA) requires depository institutions to help meet the credit needs of their communities. 131 CRA loans are typically made to low-income borrowers earning less than 80 percent of area median income, and in moderateincome neighborhoods. CRA provides an incentive for lenders to initiate affordable lending programs with underwriting flexibility. CRA loans are usually smaller than typical conventional mortgages and also are more likely to have a higher LTV, higher debt-to-income ratios and no payment reserves, and may not be carrying private mortgage insurance (PMI). Generally, at the time CRA loans are originated, many do not meet the underwriting guidelines required in order for them to be purchased by one of the GSEs. Therefore, many of the CRA loans are held in portfolio by lenders, rather than sold to Fannie Mae or Freddie Mac. Evidence is growing that CRA-type lending to lowincome families can be profitable, particularly when combined with intensive loss mitigation efforts to control credit risk. In a recent survey conducted by the Federal Reserve, lenders reported that most CRA

¹³¹ For a comprehensive analysis of CRA and its impact on affordable lending, see Robert E. Litan, Nicolas P. Retsinas, Eric S. Belsky and Susan White Haag, The Community Reinvestment Act After Financial Modernization: A Baseline Report, U.S. Department of Treasury, 2000.

loans are profitable although not as profitable as the lenders' standard products. 132

Some anticipate that the big growth market over the next decade for CRA-type lending will be urban areas. There has been some movement of population back to cities, consisting of aging Baby Boomers (so-called "empty nesters"), the children of Baby Boomers (the Echo Boomers aged 18-25), and immigrants, particularly Hispanics but also Asians. 133 The current low homeownership in inner cities (compared with the suburbs) also suggests that urban areas may be a potential growth market for lenders. Lenders are beginning to recognize that urban borrowers are different from suburban borrowers. A new or recent immigrant may have no credit history or, more likely, a loanworthy credit history that can't be substantiated by the usual methods. 134 Products for duplexes and four-plexes are not the same as a mortgage for a subdivision house in the suburbs. Programs are being implemented to meet the unique needs of urban borrowers. One program emphasizing urban areas was initiated by the American Community Bankers (ACB). Under the ACB program, which made \$16.2 billion in loans in 2002, lenders originated a variety of affordable products for first-time homebuvers and non-traditional borrowers that are then sold to Fannie Mae, Freddie Mac, Countrywide, or other investors that are partnering with the ACB. It is reported that some lenders are making these nontraditional loans for the first time.

For banks and thrifts, selling their CRA loans will free up capital to make new CRA loans. As a result, the CRA market segment provides an opportunity for Fannie Mae and Freddie Mac to expand their affordable lending programs. Section E.3c below presents data showing that purchasing targeted seasoned loans has been one strategy that Fannie Mae has chosen to improve its goals performance. Fannie Mae has been offering CRA programs since mid-1997, when it launched a pilot program, "Community Reinvestment Act Portfolio Initiative," for purchasing seasoned CRA loans in bulk transactions, taking into account track record as opposed to relying just on underwriting guidelines. Fannie Mae also started another pilot program in 1998, involving purchases of CRA loans on a flow basis, as they are originated. By 2001, Fannie Mae was investing \$10.3 billion in initiatives targeted to aid financial institutions in meeting their CRA obligations. One CRA-eligible product in 2002 included the MyCommunityMortgage suite, which provides flexible product options for low- to moderate-income borrowers purchasing one- to four-unit homes. 135 In 2002, Fannie Mae purchased or securitized more than \$882.5 million of MyCommunityMortgage products, which helped provide affordable housing solutions

for 7,866 households. 136 In addition, Freddie Mac is also purchasing seasoned affordable mortgage portfolios originated by depositories to help meet their ČRA objectives. In 2002, Freddie Mac developed credit enhancements that enable depositories to profitably sell their loans to Freddie Macthese transactions facilitate targeted affordable lending activity by providing immediate liquidity. Freddie Mac also increased its ability to purchase smaller portfolios opening this option to many community banks that otherwise would not have an outlet for their portfolios.137 The billions of dollars worth of CRA loans that will be originated, as well as the CRA loans being held in bank and thrift portfolios, offer both GSEs an opportunity to improve their performance in the single-family area.

6. Potential Homebuyers

While the growth in affordable lending and homeownership has been strong in recent years, attaining this Nation's homeownership goals will not be possible without tapping into the vast pool of potential homebuyers. Due to record low interest rates, expanded homeownership outreach, and new flexible mortgage products, the homeownership rate reached an annual record of 67.9 percent in 2002, reaching 68.3 percent in the fourth quarter of 2002. This section discusses the potential for further increases beyond those resulting from current demographic trends.

The potential homeowner population over the next decade will be highly diverse, as growing housing demand from immigrants (both those who are already here and those projected to come) and non-traditional homebuyers will help to offset declines in the demand for housing caused by the aging of the population. As noted in the above discussion of CRA, many of these potential homeowners will be located in urban areas. Immigrants and other minorities—who accounted for nearly 40 percent of the growth in the nation's homeownership rate over the past five years-will be responsible for almost two-thirds of the growth in the number of new households over the next ten years (between 2000 and 2010), as well as over the next 25 years (between 2000 and 2025). 138 By 2025, non-family households will make up a third of all households. Non-Hispanic white and traditional households will contribute only one-third and one-tenth of the growth in new households, respectively. Fannie Mae staff report that between 1980 and 1995, the number of new immigrant owners increased by 1.4 million; and between 1995 and 2010, that figure is expected to rise to by more than 50 percent to 2.2 million. These trends do not depend on the future inflow of new immigrants, as immigrants don't enter the housing market until they have been in this country for eleven years. As noted by Fannie Mae staff, "there are enough immigrants already in this country to keep housing strong for at least six and perhaps even 10 more years." ¹³⁹ As these demographic factors play out, the overall effect on housing demand will likely be sustained growth and an increasingly diverse household population from which to draw new homeowners.

Surveys indicate that these demographic trends will be reinforced by the fact that most Americans desire, and plan, to become homeowners. According to the 2002 Fannie Mae Foundation annual National Housing Survey, Americans rate homeownership as the best investment they can make, far ahead of 401Ks, retirement accounts, and stocks. The percentage of Americans who said it was a good time to buy a home was at its highest level since 1994 at 75 percent, a jump of 21 percentage points since May 2001.¹⁴⁰ In addition, the survey found that 27 percent of Americans report they are likely to buy in the next three years, and 23 percent of those have started to save or have saved enough money for a down payment. 141

Further increases in the homeownership rate depend on whether or not recent gains in the home owning share(s) of specific groups are maintained. Minorities accounted for 17 percent of owner households in 2001, but the Joint Center for Housing Studies reports that minorities were responsible for more than 40 percent (a total of 5.2 million) of the net growth in homeowners between 1993 and 2002.142 As reported by the Fannie Mae survey, 42 percent of African-American families reported that they were "very or fairly likely" to buy a home in the next three years, up from 38 percent in 1998 and 25 percent in 1997. Among Hispanics and Hispanic immigrants, the numbers reached 37 percent and 34 percent respectively. The 2002 survey also reports that more than half of Hispanic renters cite homeownership as being "one of their top priorities." In addition, nearly a third (31 percent) of baby boomers said they are "very or fairly likely to buy a home in the next three years.

In spite of these trends, potential minority homebuyers see more obstacles to buying a home, compared with the general public. Typically, the primary barriers to ownership are credit issues and a lack of funds for a downpayment and closing costs. But Freddie Mac staff emphasize that "immigrants and minorities face additional hurdles, including a lack of affordable housing, little understanding of the home buying process, and continuing financial obligations in their home countries." 143 In the Fannie Mae survey, minority groups reported misconceptions about the difficulty of becoming a homeowner such as beliefs about the amount of down payment required and mortgage lending practices, a lack of confidence about the homebuying process, poor credit ratings, and language barriers. In addition, there are continuing concerns about the limited education and low-income levels

¹³² Board of Governors of the Federal Reserve System. *The Performance and Profitability of CRA-Related Lending*. Washington, DC, 2000.

¹³³ This discussion of urban lending draws from Jeff Siegel, "Urban Lending Helps Increase Volume and Meet CRA Requirements," *Secondary Marketing Executive*, February 2003, pp. 21–23.

¹³⁴ *Ibid*.

¹³⁵ Fannie Mae, (2002), p. 5.

¹³⁶ Fannie Mae, 2002 Annual Housing Activities Report, p. 9.

¹³⁷ Fannie Mae, 2002 Annual Housing Activities Report, p. 59.

¹³⁸ This section draws from "Immigration Changes Won't Hurt Housing," *Nation Mortgage News*, January 27, 2003, p. 8.

¹³⁹ *Ibid*.

¹⁴⁰Fannie Mae, *Fannie Mae National Housing Survey*, 2002, p. 6.

¹⁴¹ *Ibid.* p. 8.

¹⁴² Joint Center for Housing Studies of Harvard University, *State of the Nation's Housing 2003*, p. 15

^{143 &}quot;Immigration Changes. * * *" Op. cit.

of recent immigrants and other minorities. Thus, the new group of potential homeowners will have unique needs. To tap this potential homeowner population, the mortgage industry will have to address these needs on several fronts, such as expanding education and outreach efforts, introducing new products, and adjusting current underwriting standards to better reflect the special circumstances of these new households.

The Bush administration has outlined a plan to expand minority homeownership by 5.5 million families by the end of the decade. The Joint Center for Housing Studies has stated that if favorable economic and housing market trends continue, and if additional efforts to target mortgage lending to lowincome and minority households are made, the overall homeownership rate could reach 70 percent by 2010.144

7. Automated Underwriting Systems and Mortgage Scorecards

This, and the following two sections, discuss special topics that have impacted the primary and secondary mortgage markets in recent years. They are automated mortgage scoring, subprime loans, and risk-based pricing. The GSEs' use of automated underwriting and mortgage scoring systems was briefly discussed in the earlier section on underwriting standards. This section expands on issues related to automated underwriting, a process that has spread throughout the mortgage landscape over the past five years, due mainly to the efforts of Fannie Mae and Freddie Mac.

According to Freddie Mac economists, automated mortgage scoring has enabled lenders to expand homeownership opportunities, particularly for underserved populations. 145 There is growing evidence that automated mortgage scoring is more accurate than manual underwriting in predicting borrower risks. Mortgage scorecards express the probability that an applicant will default as a function of several underwriting variables such as the level of down payment, monthly-payment-to-income ratios, cash reserves, and various indicators of an applicant's creditworthiness or credit history. Mortgage scorecards are statistically estimated regression-type equations, based on historical relationships between mortgage foreclosures (or defaults) and the underwriting variables. The level of down payment and credit history indicators, such as a FICO score, are typically the most important predictors of default in mortgage scoring systems.

This increased accuracy in risk assessment of mortgage scorecards has allowed risk managers to set more lenient risk standards, and thus originate more loans to marginal

applicants. Applicants who would otherwise be rejected by manual underwriting are being qualified for mortgages with automated mortgage scoring in part because the scorecard allows an applicant's weaker areas to be offset by stronger characteristics. Typically, applicants whose projected monthly debt payment (mortgage payment plus credit card payment plus automobile loan payment and so on) comprise a high percentage of their monthly income would be turned down by a traditional underwriting system that relied on fixed debt-to-income ratios (such as 36 percent). In a mortgage scoring system, these same applicants might be automatically accepted for a loan due to their stellar credit record or to their ability to raise more cash for a down payment. The entity funding or insuring the mortgage (i.e., a lender, private mortgage insurer, or a GSE) allows these positive characteristics to offset the negative characteristics because its confidence in the ability of the empiricallybased mortgage scorecard to accurately identify those applicants who are more likely or less likely to eventually default on their loan.

Automated mortgage scoring was developed as a high-tech tool with the purpose of identifying credit risks in a more efficient manner. Automated mortgage scoring has grown as competition and decreased profit margins have created demands to reduce loan origination costs. As a result, automated mortgage scoring has become the predominant (around 60 to 70 percent) mortgage underwriting method. 146 As time and cost are reduced by the automated system, the hope was that more time would be devoted by underwriters to qualifying marginal loan applicants that are referred by the automated system for a more intensive, manual underwriting review. Fannie Mae and Freddie Mac are in the forefront of new developments in automated mortgage scoring technology. Both enterprises released automated underwriting systems in 1995—Freddie Mac's Loan Prospector and Fannie Mae's Desktop Underwriter. Each system uses numerical credit scores, such as those developed by Fair, Isaac, and Company, and additional data submitted by the borrower, such as loanto-value ratios and available assets, to calculate a mortgage score that evaluates the likelihood of a borrower defaulting on the loan. The mortgage score is in essence a recommendation to the lender to accept the application, or to refer it for further review through manual underwriting. Accepted loans benefit from reduced document requirements and expedited processing.

As explained above, automated mortgage scoring allows tradeoffs between risk factors to be quantified more precisely, providing the industry more confidence in "pushing the envelope" of acceptable expected default rates. The GSEs' willingness to offer low-down-payment programs was based on their belief that their scoring models could identify the more creditworthy of the cash-

constrained applicants. The GSEs' new "timely reward" products for subprime borrowers (discussed later) are integrated with their mortgage scoring systems. Automated mortgage scoring presents the opportunity to remove discrimination from mortgage underwriting, to accept all applicants, and to bring fair, objective, statistically based competitive pricing, greatly reducing costs for all risk groups. Some institutions have sought to better model and automate marginal and higher-risk loans, which have tended to be more costly to underwrite and more difficult to automate. 147

Along with the promise of benefits, however, automated mortgage scoring has raised concerns. These concerns are related to the possibility of disparate impact and the proprietary nature of the mortgage score inputs. The first concern is that low-income and minority homebuyers will not score well enough to be accepted by the automated underwriting system, resulting in their getting fewer loans. African-American and Hispanic borrowers, for example, tend to have a poorer credit history record than other borrowers, which means they are more likely to be referred (rather than automatically accepted) by automated mortgage scoring systems that rely heavily on credit history measures such as a FICO score. There is also a significant statistical relationship between credit history scores and the minority composition of an area, after controlling for other locational characteristics. 148

The second concern relates to the "black box" nature of the scoring algorithm. The scoring algorithm is proprietary and therefore it is difficult for applicants to know the reasons for their scores. However, it should be noted that the GSEs have taken steps to make their automated underwriting systems more transparent. Both Fannie Mae and Freddie Mac have published the factors used to make loan purchase decisions in Desktop Underwriter and Loan Prospector, respectively. In response to criticisms aimed at using FICO scores in mortgage underwriting, Fannie Mae's new version of Desktop Underwriter (DU) 5.0 replaces credit scores with specific credit characteristics and provides expanded approval product offerings for borrowers who have blemished credit. The specific credit characteristics include variables such as past delinquencies; credit records, foreclosures, and accounts in collection; credit card line and use; age of accounts; and number of credit inquiries.149

With automated mortgage scoring replacing traditional manual underwriting comes the fear that the loss of individual attention poses a problem for people who have inaccuracies on their credit report or for members of cultural groups or recent immigrants who do not use traditional credit and do not have a credit score. Some subprime lenders and underwriters have claimed that their manual underwriting of

¹⁴⁴ Joint Center for Housing Studies of Harvard University, *State of the Nation's Housing 1998*, p. 20

¹⁴⁵ Peter M. Zorn, Susan Gates, and Vanessa Perry, "Automated Underwriting and Lending Outcomes: The Effect of Improved Mortgage Risk Assessment on Under-Served Populations. Program on Housing and Urban Policy," *Conference Paper Series*, Fisher Center for Real Estate and Urban Economics. University of California Berkeley, 2001, p. 5.

¹⁴⁶John W. Straka, "A Shift in the Mortgage Landscape: The 1990s Move to Automated Credit Evaluations," *Journal of Housing Research*, 2000, (11)2: p. 207.

¹⁴⁷ Ibid. pp. 208-217.

¹⁴⁸ Robert B. Avery, Raphael W. Bostic, Paul S. Calem, and Glenn B. Canner, *Credit Scoring: Issues and Evidence from Credit Bureau Files*, mimeo, 1998, p. 24.

¹⁴⁹ Fannie Mae, September 4, 2002, p. 33.

high-risk borrowers cannot be automated with mortgage scoring. Although automated mortgage scoring has greatly reduced the cost of many lower-risk loans that are easier to rate, the cost of manually underwriting grayarea and higher-risk applicants still remains high. 150 There is also the fear that applicants who are referred by the automated system will not be given the full manual underwriting for the product that they initially applied for—rather they might be pushed off to higher priced products such as a subprime or FHA loan. In this case, the applicant may have had special circumstances that would have been clarified by the traditional manual underwriting, thus enabling the applicant to receive a prime loan consistent with his or her creditworthiness.

Banking regulators and legal analysts acknowledge the value of automated mortgage scoring, although some skeptics have noted concerns regarding fair lending, potential fraud, privacy issues, and the ability of models to withstand changing economic conditions. 151 With the rise of automated mortgage scoring, the great difference in Internet usage known as the "digital divide" could result in informational disadvantages for less educated and lower income consumers. In addition to the digital divide, the lack of financial literacy in the United States may also result in a disparate impact on low-income and minority borrowers.152

2002 Urban Institute Study. The Urban Institute submitted a report to HUD in 2002 on subprime markets, the role of GSEs, and risk-based pricing. 153 The study took a preliminary look at the use of automated underwriting systems for a small sample of lenders. After conducting interviews with both subprime and prime lenders, the report noted that all of the lenders in the study had implemented some type of automated underwriting system. These lenders stated that automated underwriting raised their business volume and streamlined their approval process. In addition, the lenders reported they were able to direct more underwriting resources to borderline applications despite an increase in business volume.

Even with the use of automated mortgage scoring, the lenders in the study continued to conduct at least a cursory review to validate the application material. The majority of the lenders still used manual underwriting to originate loans not recommended for approval with automated

mortgage scoring. The lenders reported they formulated their policies and procedures to make certain that borrowers receive the best mortgage, according to product eligibility. This study will be further referenced in a following section regarding subprime markets.

2001 Freddie Mac Study. According to a Freddie Mac study published by the Fisher Center for Real Estate and Urban Economics at University of California at Berkeley underserved populations have benefited from automated mortgage scoring because of the increased ability to distinguish between a range of credit risks. In this paper, Freddie Mac economists compared the manual and automated mortgage scoring approval rates of a sample of minority loans originated in 1993-94 and purchased by Freddie Mac. While manual underwriters rated 51 percent of the minority loans in the sample as accept, automated mortgage scoring would have rated 79 percent of the loans as accept.154

In comparison to manual underwriting, this study found automated mortgage scoring not only less discriminatory but also more accurate in predicting risk. Two versions of Freddie Mac's automated underwriting system, Loan Prospector (LP), were used to review three groups of mortgage loans purchased by Freddie Mac. ¹⁵⁵ The study found that LP was a highly accurate predictor of mortgage default. The resulting improved accuracy translates into benefits for borrowers, who would otherwise be rejected by manual underwriting to qualify for mortgages.

Analysis of the first group of loans showed that loans rated as "caution" were four times more likely to default than the average for all loans. Minority borrowers whose loans were rated as "caution" were five times more likely to default, and low-income borrowers whose loans were rated as "caution" were four times more likely to default than the average for all loans. The 2000 version of LP approved 87.1 percent of loans generated through affordable housing programs, compared to a 51.6 percent approval rate when the same loans were assessed using manual underwriting procedures. Further, the study found LP more accurate than manual underwriting at predicting default risk even with a higher approval rate. The study also demonstrated that Freddie Mac's vear 2000 version of LP was more accurate in predicting risk than its 1995 version.

Concluding Observations. Automated underwriting has enabled lenders to reach new markets and expand homeownership opportunities, as illustrated by the 2001 Freddie Mac study. Increased accuracy with automated mortgage scoring has led to the development of new mortgage products that would have been previously considered too risky. For example, Freddie Mac uses Loan Prospector to approve Alt A loans, which tend to have nontraditional documentation; A-minus loans, which pose a higher risk of default; and other higher-risk mortgages, like 100 percent LTV loans. Both GSEs have and continue to add new products to develop their automated underwriting systems to reach more marginal borrowers.

Despite the gains in automated mortgage scoring and other innovations, minorities are still less likely to be approved for a loan. The difference in minority and non-minority accept rates may reflect greater social inequities in financial capacity and credit, which are integral variables in both manual and automated underwriting. In the future, the accuracy of automated mortgage scoring will hinge on updating the models and making them more predictive while reducing the disparate impact on low-income and minority borrowers. 156 The fairness of automated scoring systems will also depend importantly on whether referred applicants receive a traditional manual underwriting for the loan that they initially applied for, rather than being immediately offered a higher priced loan that does not recognize their true creditworthiness.

In addition to using automated underwriting systems as a tool to help determine whether a mortgage application should be approved, the GSEs' automated underwriting systems are being further adapted to facilitate risk-based pricing. With risk-based pricing, mortgage lenders can offer each borrower an individual rate based on his or her risk. The division between the subprime and the prime mortgage market will begin to fade with the rise of risk-based pricing, which is discussed in the next section on the subprime market.

8. Subprime Lending

The subprime mortgage market provides mortgage financing to credit-impaired borrowers—those who may have blemishes in their credit record, insufficient credit history, or non-traditional credit sources. This section examines several topics related to subprime lending including (a) the growth and characteristics of subprime loans, (b) the neighborhood concentration of subprime lending, (c) predatory lending, and (d) purchases of subprime mortgages by the GSEs. Section C.9 follows with a discussion of risk-based pricing.

a. The Growth and Characteristics of Subprime Loans

The subprime market has grown rapidly over the past several years, increasing from an estimated \$35 billion in 1994 to \$160 billion in 1999 and \$173.3 billion in 2001, before rising to \$213 billion in 2002. The subprime share of total market originations rose from 4.6 percent in 1994 to a high of 15 percent in 1999, and then fell to 8.5 percent in both 2001 and 2002.157 Various factors have led to the rapid growth in the subprime market: federal legislation preempting state restrictions on allowable rates and loan features, the tax reform act of 1986 which encouraged tax-exempt home equity financing of consumer debt, increased demand for and availability of consumer debt, a substantial increase in homeowner equity due to house price appreciation, and a ready supply of available funds through

¹⁵⁰ Kenneth Temkin, Jennifer E.H. Johnson, and Diane Levy, *Subprime Markets, The Role of GSEs, and Risk-Based Pricing,* Washington: The Urban Institute. Report Prepared for the U.S. Department of Housing and Urban Development, 2002.

¹⁵¹ Allen J. Fishbein, "Is Credit Scoring a Winner for Everyone?" *Stone Soup*, 2000, 14(3): pp. 14–15. See also Fitch IBCA, Inc., *Residential Mortgage Credit Scoring*, New York, 1995 and Jim Kunkel, "The Risk of Mortgage Automation," in *Mortgage Banking*, 1995, 57(8): pp. 69–76.

¹⁵² Zorn et al., 2001, pp. 19-20.

¹⁵³ Kenneth Temkin, Jennifer E.H. Johnson, and Diane Levy, *Subprime Markets, The Role of GSEs, and Risk-Based Pricing,* Washington: The Urban Institute. Report Prepared for the U.S. Department of Housing and Urban Development, 2002.

¹⁵⁴ Zorn, et al., 2001, pp. 14-15.

¹⁵⁵ *Ibid.* p. 5.

¹⁵⁶ *Ibid.* pp. 18–19.

¹⁵⁷ Subprime origination data are from Inside Mortgage Finance. For the 2002 estimates, see "Subprime Origination Market Shows Strong Growth in 2002," *Inside B&C Lending*, published by Inside Mortgage Finance, February 3, 2003, page 1.

Wall Street securitization. ¹⁵⁸ It is important to note that subprime lending grew in the 1990s mostly without the assistance of Fannie Mae and Freddie Mac.

Generally, there are three different types of products available for subprime borrowers. These include: home purchase and refinance mortgages designed for borrowers with poor credit histories; "Alt A" mortgages that are usually originated for borrowers who are unable to document all of the underwriting information but who may have solid credit records; and high loan-to-value mortgages originated to borrowers with fairly good credit. Fannie Mae and Freddie Mac are more likely to serve the first two types of subprime borrowers.¹⁵⁹

Borrowers use subprime loans for various purposes, which include debt consolidation, home improvements, and an alternative source of consumer credit. Between 1999 and 2001, about two-thirds of subprime loans were refinance loans. It has been estimated that 59 percent of refinance loans were "cash out" loans. 160 According to a joint HUD-Treasury report, first liens accounted for more than three out of four loans in the subprime market.

The subprime market is divided into different risk categories, ranging from least risky to most risky: A-minus, B, C, and D. While there are no clear industry standards for defining the subprime risk categories, Inside Mortgage Finance defines them in terms of FICO scores—580-620 for A-minus, 560-580 for B, 540-560 for C, and less than 540 for D. The A-minus share of the subprime market rose from 61.6 percent in 2000 to 70.7 percent in 2001.161 For the first nine months of 2002, the A-minus share accounted for 74 percent of the market, while the B share accounted for 11 percent, the C share accounted for 7.2 percent, and the D share accounted for 7.9 percent of the market.162

Delinquency rates by type of subprime loan are as follows: 3.36 percent for A-minus loans, 6.67 percent for B, 9.22 percent for C, and 21.03 percent for D, according to the Mortgage Information Corporation. 163
Because of their higher risk of default, subprime loans typically carry much higher mortgage rates than prime mortgages. Recent quotes for a 30-year Fixed Rate Mortgage were 8.85 percent for A-minus (with an 85 percent LTV), 9.10 percent for B credit (with an 80 percent LTV), and 10.35 percent for C credit (with a 75 percent LTV). 164 As the low

loan-to-value (LTV) ratios indicate, one loss mitigation technique used by subprime lenders is a high down payment requirement. Some housing advocates have expressed concern that the perceptions about the risk of subprime loans may not always be accurate, for example, creditworthy borrowers in inner city neighborhoods may be forced to use subprime lenders because mainstream lenders are not doing business in their neighborhoods (see below).

Subprime borrowers are much more likely to be low income and be a minority than other borrowers. Between 1999 and 2001, 43.1 percent of subprime loans in the conventional conforming market went to low-income borrowers, compared with 29.5 percent of conventional conforming loans. During that same period, 19.9 percent of subprime loans were for African-American borrowers, compared with 6.5 percent of all conventional conforming loans. However, what distinguishes subprime loans from other loans is their concentration in African-American neighborhoods.

b. The Neighborhood Concentration of Subprime Lending

The growth in subprime lending over the last several years has benefited creditimpaired borrowers as well as those borrowers who choose to provide little documentation for underwriting. However, studies showing that subprime lending is disproportionately concentrated in lowincome and minority neighborhoods have raised concerns about whether mainstream lenders are adequately serving these neighborhoods. A study of subprime lending in Chicago by The Woodstock Institute concluded that a dual, hyper-segmented mortgage market existed in Chicago, as mainstream lenders active in white and upper-income neighborhoods were much less active in low-income and minority neighborhoods-effectively leaving these neighborhoods to unregulated subprime lenders. 165 As part of the HUD-Treasury Task Force on Predatory Lending, HUD's Office of Policy Development and Research released a national level study-titled Unequal Burden: Income and Racial Disparities in Subprime Lending in America—that showed families living in low-income and African-American neighborhoods in 1998 relied disproportionately on subprime refinance lending, even after controlling for neighborhood income. An update of that

analysis for the year 2000 yields the following trends: 166

- In 2000, 36 percent of refinance mortgages in low-income neighborhoods were subprime, compared with only 16 percent in upper-income neighborhoods.
- Subprime lending accounted for 50 percent of refinance loans in majority African-American neighborhoods—compared with only 21 percent in predominantly white areas (less than 30 percent of population is African-American).
- The most dramatic view of the disparity in subprime lending comes from comparing homeowners in upper-income African-American and white neighborhoods. Among homeowners living in the upper-income white neighborhoods, only 16 percent turned to subprime lenders in 2000. But 42 percent of homeowners living in upper-income African-American neighborhoods relied upon subprime refinancing which is substantially more than the rate (30 percent) for homeowners living in low-income white neighborhoods.
- Similar results are obtained when the analysis is conducted for borrowers instead of neighborhoods. Upper-income African-American borrowers are twice as likely as low-income white borrowers to have subprime loans. Over one-half (54 percent) of low-income African-American borrowers turn to subprime lenders, as does over one-third (35 percent) of upper-income African-American borrowers. By comparison, only 24 percent of low-income white borrowers and 12 percent of upper-income white borrowers, rely upon subprime lenders for their refinance loans. 167

It does not seem likely that these high market shares by subprime lenders in lowincome and African-American neighborhoods can be justified by a heavier concentration of households with poor credit in these neighborhoods. Rather it appears that subprime lenders may have attained such high market shares by serving areas where prime lenders do not have a significant presence. The above finding that upper-income black borrowers rely more heavily on the subprime market than lowincome white borrowers suggests that a portion of subprime lending is occurring with borrowers whose credit would qualify them for lower cost conventional prime loans. A lack of competition from prime lenders in low-income and minority neighborhoods has increased the chances that borrowers in these communities are paying a high cost for credit. As explained

 $^{^{165}\,\}mathrm{Daniel}$ Immergluck, The Predatory Lending Crisis in Chicago: The Dual Mortgage Market and Local Policy, testimony before the Chicago City Council, April 5, 2000. Immergluck found that subprime lenders received 74 percent of refinance applications in predominantly black tracts compared to 21 percent in predominantly white tracts in 1998. According to Immergluck, these racial disparities provide evidence that the residential finance market in Chicago is hypersegmented, resulting in the increased likelihood that minorities receive mortgage credit from a subprime, rather than a prime, lender in Chicago. Also see Daniel Immergluck, Stark Differences: The Explosion of the Subprime Industry and Racial Hypersegmentation in Home Equity Lending, Woodstock Institute, October 2000.

¹⁵⁸Temkin et. al, 2002, p.1.

¹⁵⁹ Kenneth Temkin, Jennifer E.H. Johnson, Diane Levy, Subprime Markets, The Role of GSEs, and Risk Based Pricing, Washington: The Urban Institute. Report Prepared for the Department of Housing and Urban Development, 2002, p. 4.

¹⁶⁰ U.S. Department of Housing and Urban Development/U.S. Department of the Treasury, *Curbing Predatory Lending Report*, 2000, p. 31.

¹⁶¹ "Wholesale Dominates Subprime Market Through 3rd Quarter '02,'' *Inside B&C Lending*, published by Inside Mortgage Finance, December 16, 2002, pp. 1–2.

 ¹⁶² Inside B&C Lending, November 16, 2002, p. 2.
 ¹⁶³ Mortgage Information Corporation, *The Market Pulse*, Winter 2001, pp. 4–6.

¹⁶⁴ *Inside B&C Lending*, published by Inside Mortgage Finance, February 17, 2003, page 13.

¹⁶⁶ See Randall M. Scheessele, *Black and White Disparities in Subprime Mortgage Refinance Lending*, Housing Finance Working Paper HF–014, Office of Policy Development and Research, U.S. Department of Housing and Urban Development, April 2002.

¹⁶⁷For an update to 2001, see The Association of Community Organizers for Reform Now (ACORN), Separate and Unequal Predatory Lending in America, 2002. In 2001, subprime lenders originated 27.8 percent of all conventional refinance loans for African-Americans, 13.6 percent for Hispanic homeowners, and just 6.3 percent for white homeowners. Overall, African-Americans were 4.4 times more likely to use a subprime lender than whites, and Hispanics were 2.2 times more likely to do so.

next, there is also evidence that the higher interest rates charged by subprime lenders cannot be fully explained solely as a function of the additional risks they bear. Thus, a greater presence by mainstream lenders could possibly reduce the high up-front fees and interest rates being paid by residents of low-income and minority neighborhoods.

The Freddie Mac study presented evidence that subprime loans bear interest rates that are higher than necessary to offset the higher credit risks of these loans. 168 The study compared (a) the interest rate on subprime loans rated A-minus by the lenders originating these loans with (b) the interest rates on prime loans purchased by Freddie Mac and rated A-minus by a Freddie Mac underwriting model. Despite the fact that both loan groups were rated A-minus, on average the subprime loans bore interest rates that were 215 basis points higher. Even assuming that the credit risk of the subprime loans was in fact higher than the prime loans, the study could not account for such a large discrepancy in interest rates. Assuming that default rates might be three to four times higher for the subprime loans would account for a 90 basis point interest rate differential. Assuming that servicing the subprime loans would be more costly would justify an additional 25 basis point differential. But even after allowing for these possible differences, the Freddie Mac researchers concluded that the subprime loans had an unexplained interest rate premium of 100 basis points on average. 169

Banking regulators have recognized the link between the growth in subprime lending and the absence of mainstream lenders and have urged banks and thrifts that lending in these neighborhoods not only demonstrates responsible corporate citizenship but also profitable lending. Ellen Seidman, former Director of the Office of Thrift Supervision, stated that, "Many of those served by the subprime market are creditworthy borrowers who are simply stuck with subprime loans or subprime lenders because they live in neighborhoods that have too few credit or banking opportunities."

With respect to the question of whether borrowers in the subprime market are sufficiently creditworthy to qualify for more traditional loans, Freddie Mac has said that one of the promises of automated underwriting is that it might be better able to identify borrowers who are unnecessarily assigned to the high-cost subprime market. Freddie Mac has estimated that 10–30 percent of borrowers who obtain mortgages in the subprime market could qualify for a conventional prime loan through Loan Prospector, Freddie Mac's automated

underwriting system.¹⁷⁰ Fannie Mae has stated that half of all mortgage borrowers steered to the high-cost subprime market are in the A-minus category, and therefore are prime candidates for Fannie Mae.¹⁷¹

c. Predatory Lending

Predatory lending has been a disturbing part of the growth in the subprime market. Although questions remain about its magnitude, predatory lending has turned homeownership into a nightmare for far too many households. The growing incidence of abusive practices has been stripping borrowers of their home equity, threatening families with foreclosure, and destabilizing neighborhoods. Also, in some cities, there are indications that unscrupulous realtors mortgage brokers, appraisers, and lenders are duping some FHA borrowers into purchasing homes at an inflated price or with significant undisclosed repairs. The problems associated with home equity fraud and other mortgage abuses are not new ones, but the extent of this activity seems to be increasing. The expansion of predatory lending practices along with subprime lending is especially troubling since subprime lending is disproportionately concentrated in low- and very-low income neighborhoods, and in African-American neighborhoods.

The term "predatory lending" is a short hand term that is used to encompass a wide range of abuses. While there is broad public agreement that predatory lending should have no place in the mortgage market, there are differing views about the magnitude of the problem, or even how to define practices that make a loan predatory. The joint HUD Treasury report, Curbing Predatory Home Mortgage Lending, concluded that a loan can be predatory when lenders or brokers: charge borrowers excessive, often hidden fees (called "packing fees"); successively refinance loans at no benefit to the borrower (called "loan flipping"); make loans without regard to a borrower's ability to repay; and, engage in high-pressure sales tactics or outright fraud and deception. These practices are often combined with loan terms that, alone or in combination, are abusive or make the borrower more vulnerable to abusive practices. Vulnerable populations, including the elderly and low-income individuals, and low-income or minority neighborhoods, appeared to be especially targeted by unscrupulous lenders.

One consequence of predatory lending is that borrowers are stripped of the equity in their homes, which places them at an increased risk of foreclosure. In fact, high foreclosure rates for subprime loans provide the most concrete evidence that many subprime borrowers are entering into mortgage loans that they simply cannot afford. The high rate of foreclosures in the subprime market has been documented by

HUD and others in recent research studies. 172 These studies have found that foreclosures by subprime lenders grew rapidly during the 1990s and now exceed the subprime lenders' share of originations. In addition, the studies indicate that foreclosures of subprime loans occur much more quickly than foreclosures on prime loans, and that they are concentrated in low-income and African-American neighborhoods. Of course, given the riskier nature of these loans, a higher foreclosure rate would be expected. With the information available it is not possible to evaluate whether the disparities in foreclosure rates are within the range of what would be expected for loans prudently originated within this risk class. But findings from these studies about the high rate of mortgage foreclosure associated with subprime lending reinforce the concern that predatory lending can potentially have devastating effects for individual families and their neighborhoods.

At this time, there are open questions about the effectiveness of the different approaches being proposed for eradicating predatory lending and the appropriate roles of different governmental agencies-more legislation versus increased enforcement of existing laws, long-run financial education versus mortgage counseling, Federal versus state and local actions. In its recent issuance of predatory lending standards for national banks, the Office of the Comptroller of the Currency (OCC) cited the efforts of Fannie Mae and Freddie Mac' in reducing predatory lending.173 The OCC advised banks against abusive practices, such as rolling singlepremium life insurance into a loan. The agency cited guidelines developed by Fannie Mae and Freddie Mac as a "useful reference" or starting point for national banks. Following publication of HUD's proposed 2000 Rule inviting comments on disallowing goals credit for high cost mortgage loans, Fannie Mae and Freddie Mac told lenders they would no longer purchase loans with certain abusive practices, such as excessive fees and failing to consider a borrower's ability to repay the debt.

It is important to re-emphasize that predatory lending generally occurs in neighborhoods where borrowers have limited access to mainstream lenders. While predatory lending can occur in the prime market, it is ordinarily deterred in that market by competition among lenders, greater homogeneity in loan terms and greater financial information among

¹⁶⁸ Howard Lax, Michael Manti, Paul Raca, and Peter Zorn, "Subprime Lending: An Investigation of Economic Efficiency," February 25, 2000.

¹⁶⁹ It should also be noted that higher interest rates are only one component of the higher cost of subprime loans since borrowers also often face higher origination points. The Freddie Mac study did not find a large differential between prime and subprime loans in points paid, but the study notes that subprime loans often have points rolled into the loan principal, which cannot be identified with their data.

¹⁷⁰ Freddie Mac, *We Open Doors for America's Families*, Freddie Mac's Annual Housing Activities Report for 1997, March 16, 1998, p. 23.

¹⁷¹Rommy Fernandez, "Fannie Mae Eyes Half of the Subprime Market," in *The American Banker*, March 1, 2002. Also see "Fannie Mae Vows More Minority Lending," *Washington Post*, March 16, 2000, p. EO1.

¹⁷² For an overview of these studies, see Harold L. Bunce, Debbie Gruenstein, Christopher E. Herbert, Randall M. Scheessele, Subprime Foreclosures: The Smoking Gun of Predatory Lending, 2000. Also see Abt Associates Inc., Analyzing Trends in Subprime Originations and Foreclosures: A Case Study of the Atlanta Metro Area, February 2000 and Analyzing Trends in Subprime Originations and Foreclosures: A Case Study of the Boston Metro Area, September 2000; National Training and Information Center, Preying on Neighborhoods: Subprime Mortgage Lenders and Chicagoland Foreclosures, 2000; and the HUD study, Unequal Burden in Baltimore: Income and Racial Disparities in Subprime Lending, May 2000.

¹⁷³ "OCC Cites Fannie, Freddie Predatory Lending Rules As Model," Dow Jones Business News, February 25, 2003.

borrowers. Thus, one solution to address this problem would be to encourage more mainstream lenders to do business in our inner city neighborhoods.

d. Purchases of Subprime Mortgages by the GSEs

Fannie Mae and Freddie Mac have shown increasing interest in the subprime market since the latter half of the 1990s. The GSEs entered this market by purchasing securities backed by non-conforming loans. Freddie Mac, in particular, increased its subprime business through structured transactions, with Freddie Mac guaranteeing the senior classes of senior/subordinated securities. The two GSEs also purchase subprime loans on a flow basis. Fannie Mae began purchasing subprime loans through its Timely Payment Reward Mortgage program in June 1999, and Freddie Mac rolled out a similar product, Affordable Merit Rate, in May 2000 (described below). In addition to purchasing subprime loans for borrowers with blemished credit, the GSEs also purchase another nonconforming loan called an Alternative-A or "Alt-A" mortgage. These mortgages are made to prime borrowers who do not want to provide full documentation for loans. The GSEs' interest in the subprime market has coincided with a maturation of their traditional market (the conforming conventional mortgage market), and their development of mortgage scoring systems, which they believe allows them to accurately model credit risk. Although the GSEs account for only a modest share of the subprime market today, some market analysts estimate that they could purchase as much as half of the overall subprime market in the next few years.174

Precise information on the GSEs' purchases of subprime loans is not readily available. Data can be pieced together from various sources, but this can be a confusing exercise because of the different types of nonconforming loans (Alt-A and subprime) and the different channels through which the GSEs purchase these loans (through securitizations and through their "flowbased" product offerings). Freddie Mac, which has been the more aggressive GSE in the subprime market, purchased approximately \$12 billion in subprime loans during 1999-\$7 billion of A-minus and alternative-A loans through its standard flow programs and \$5 billion through structured transactions. 175 In 2000, Freddie Mac purchased \$18.6 billion of subprime loans on a flow basis in addition to another \$7.7 billion of subprime loans through structured transactions. 176 Freddie Mac securitized \$9 billion in subprime and Alt-A product in 2001 and \$11.1 billion in 2002.

Fannie Mae initiated its Timely Payments product in September 1999, under which borrowers with slightly damaged credit can qualify for a mortgage with a higher interest rate than prime borrowers. Under this product, a borrower's interest rate will be

reduced by 100 basis points if the borrower makes 24 consecutive monthly payments without a delinquency. Fannie Mae has revamped its automated underwriting system (Desktop Underwriter) so loans that were traditionally referred for manual underwriting are now given four risk classifications, three of which identify potential subprime (A-minus) loans. 177 Fannie purchased about \$600 million of subprime loans on a flow basis in 2000. 178 Fannie Mae securitized around \$0.6 billion in subprime mortgages in 2000, before increasing to \$5.0 billion in 2001 and 7.3 billion in 2002. 179

In terms of total subprime activity (both flow and securitization activities), Fannie Mae purchased \$9.2 billion in 2001 and over \$15 billion in 2002, the latter figure representing about 10 percent of the market, according to Fannie Mae staff. 180

A greater GSE role in the subprime lending market will most likely have a significant impact on the subprime market. Currently, the majority of subprime loans are not purchased by GSEs, and the numbers of lenders originating subprime loans typically do not issue a large amount of prime loans. Partly in response to higher affordable housing goals set by HUD in its new rule set in 2000, the GSEs are increasing their business in the subprime market. In the 2000 GSE Rule, HUD identified subprime borrowers as a market that can assist Fannie Mae and Freddie Mac in reaching their higher affordable housing goals while also helping establish more standardization in the subprime market. According to an Urban Institute study in 2002, many subprime lenders believe that successful companies serving high-risk borrowers need to have specialized expertise in outreach, servicing, and underwriting, which is lacking among most prime lenders. 181 These lenders do not believe the more standardized approaches of prime lenders and the GSEs will work with subprime borrowers, who require the more customized and intensive origination and loan servicing processes currently offered by experienced subprime lenders.

As noted above, both Fannie Mae and Freddie Mac make the claim that the subprime market is inefficient, pointing to evidence indicating that subprime borrowers pay interest rates, points, and fees in excess of the increased costs associated with serving riskier borrowers in the subprime market. ¹⁸² A recent Freddie Mac study found automated mortgage scoring less discriminatory and more accurate in predicting risk than manual systems such as those currently used by subprime lenders. ¹⁸³ According to Fannie

Mae, although a high proportion of borrowers in the subprime market could qualify for less costly prime mortgages, it remains unclear why these borrowers end up in the subprime market. ¹⁸⁴ Fannie Mae and Freddie Mac believe they can bring more efficiency to the subprime market by creating standardized underwriting and pricing guidelines in the subprime market. An expanded GSE presence in the subprime market could be of significant benefit to lower-income and minority families if it attracted more mainstream lenders and competition to those inner-city neighborhoods that are currently served mainly by subprime lenders.

Many subprime lenders do not think it is appropriate for Fannie Mae and Freddie Mac to increase their role in the subprime market because they do not view the subprime market as inefficient. Some officials in subprime mortgage markets claim the higher prices paid by borrowers in the subprime market appropriately reflect the risks that come from extending credit to riskier borrowers. These officials believe it is unfair for GSEs to enter an efficient, private market that provides a necessary service to creditimpaired borrowers. Opponents of a larger GSE role in the subprime market argue GSEs have an unfair competitive advantage because they can secure capital at cheaper rates. 185 Because the GSEs have a funding advantage over other market participants, they have the ability to under price their competitors and increase their market share. 186 This advantage, as has been the case in the prime market, could allow the GSEs to eventually play a significant role in the subprime market. Many subprime lenders fear they will be unfairly driven out of business as the GSEs increase their role in the subprime market.

9. Risk-Based Pricing

The expanded use of automated underwriting and the initial uses of riskbased pricing are changing the mortgage lending environment, often blurring the distinctions between the prime and subprime market. Prime lenders are now using automated underwriting systems that are being adapted to facilitate risk-based pricing. For some time, the majority of prime mortgage borrowers have received loan rates based on average cost pricing. Generally, borrowers receive roughly the same Annual Percentage Rate 187 (APR), regardless of the risk of loss to the lender. The risk of all borrowers is averaged together, and the price is determined by the average risk.

In contrast, risk-based pricing enables mortgage lenders to offer each borrower an individualized interest rate based on his or her risk. Or, more broadly, to offer interest rates based on whether or not the borrower

¹⁷⁴ Temkin et al., 2002, p. 1.

¹⁷⁵ David A. Andrukonis, "Entering the Subprime Arena," *Mortgage Banking*, May 2000, pp. 57–60.

¹⁷⁶ Subprime Lenders Mixed on Issue of GSE Mission Creep," Inside B and C Lending, March 19, 2001

¹⁷⁷ See Lederman, et al., *Op cit.*

¹⁷⁸ Kenneth Temkin, Jennifer E. H. Johnson, and Diane K. Levy, "Subprime Markets, the Role of GSEs, and Risk-Based Pricing," *Urban Institute*, August 2001, p. 1.

¹⁷⁹ Inside Mortgage Finance's, "Inside MBS & ABS," December 15, 2000 and March 8, 2002.

¹⁸⁰ Statement by Mercy Jimenez of Fannie Mae in "Fannie Mae: Forges Ahead in Subprime," Secondary Marketing Executive, February 2003, p. 15

¹⁸¹ Temkin et al., 2002, p. 1

¹⁸² See Lax et al., 2000.

¹⁸³Zorn, et al., 2001, p. 5.

¹⁸⁴Fannie Mae, Remarks Prepared for Delivery by Franklin Raines, Chairman and CEO of Fannie Mae to the National Community Reinvestment Coalition. Washington, DC, March 20, 2000.

¹⁸⁵Temkin et al., 2002, p. 1.

¹⁸⁶ For an explanation of the GSEs funding advantage see *Government Sponsorship of FNMA* and FHLMC, United States Department of the Treasury, July 11, 1996.

¹⁸⁷ Annual Percentage Rate takes into account points, fees, and the periodic interest rate.

falls into a certain category of risk, such as specific loan-to-value and FICO score combination or specified mortgage score range. Lenders could also set the interest rate based on various factors including the probability of prepayment and characteristics of the underlying collateral, as well as the default risk of the borrower. Borrowers that pose a lower risk of loss to the lender would then be charged a comparatively lower rate than those borrowers with greater risk. Rather than lower risk borrowers cross-subsidizing higher risk borrowers like in average cost pricing, lower risk borrowers pay a relatively lower rate.

In response to the expanded use of automated underwriting and pressures from the GSEs, other purchasers of loans, mortgage insurers, and rating firms, lenders are increasing their use of risk-based pricing. 188 In today's markets, some form of differential pricing exists for the various subprime categories, for new products targeted at credit-impaired borrowers (such as Fannie Mae's Timely Payments product), and for private mortgage insurance across all credit ranges. For example, private mortgage insurers use FICO scores and "Accept" determinations from the GSEs" automated underwriting systems to make adjustments to insurance premiums. 189 Rating agencies vary subordination requirements based on the credit qualify of the underlying collateral.

Many believe there is cross-subsidization within the crude risk categories used in today's market. For example, some of the better quality subprime borrowers in the Aminus category may be inappropriately assigned to the subprime market. The GSEs and others are attempting to learn more about the subprime market, and their initial efforts suggest that there will be an increase in the use of risk-based pricing within this market, although it is recognized that the expansion of risk-based pricing depends importantly on these parties gaining a better understanding of the subprime borrower and the ability of their mortgage scoring systems to predict risk within this market. It must be noted that the power of the underlying algorithm in automated underwriting systems determines the ability of these systems to accurately predict risk and set prices.

If prime lenders adopted risk-based pricing, many would be willing to lend to riskier subprime borrowers because their risk would now be offset with an increase in price. In theory, the mortgage market should expand because all mortgages will be approved at a price commensurate with risk, rather than setting a risk floor and approving no one beneath the floor. Risk-based pricing could also expand the prime lenders' market by enabling them to reach a new group of underserved customers. 190 Taking advantage of GSEs' lower cost of capital, GSEs may be able to offer borrowers who could not afford a rate in the subprime market a rate they can afford resulting from risk-based pricing.

Risk-based pricing also poses challenges on the mortgage market because some of the more risky borrowers (who are currently cross-subsidized by less risky borrowers) may not be able to afford their higher, risk-based interest rate. Also, the adoption of an automated risk-based pricing system may have an uncertain effect on minority groups, who tend to have lower credit scores, as discussed earlier. On the other hand, if minorities are eligible for prime financing, the cost of financing minorities may fall as will the potential for subprime lenders to draw minorities to their higher-priced products.

As the GSEs become more comfortable with subprime lending, the line between what today is considered a subprime loan versus a prime loan will likely deteriorate, making expansion by the GSEs look more like an increase in the prime market. This melding of markets could occur even if many of the underlying characteristics of subprime borrowers and the market's evaluation of the risks posed by these borrowers remain unchanged. Increased involvement by the GSEs in the subprime market will result in more standardized underwriting guidelines and the increased participation of traditional lenders. In fact, there are indications that mainstream players are already increasing their activity in this market. According to staff from Moody's Investors Service, the growing role of large mortgage aggregators in the subprime market has been a key factor in the improving credit qualify on deals issued in 2002.191 According to a representative from Washington Mutual, subprime credit qualify has also improved as lenders carve out new loan categories that fall somewhere between the large Alt A market and traditional subprime business. 192 As the subprime market becomes more standardized, market efficiencies will reduce borrowing costs. Lending to credit-impaired borrowers will, in turn, increasingly make good business sense for the mortgage market.

C. Factor 2: Economic, Housing, and Demographic Conditions: Multifamily Mortgage Market

1. Introduction

At the time of the previous GSE rulemaking in 2000, the multifamily rental housing market was coming off several years of generally positive performance. Vacancies were low in most markets and rent increases were matching or exceeding economy-wide inflation. A key to this strong performance was the volume of new multifamily construction, which was at a level consistent with demand growth. Job growth and income gains helped many renters pay the higher rents without undue burden. As always, conditions varied from region to region, and across market segments, but the overall tone of the apartment market was quite healthy.

Much has changed in the subsequent three years. The economic slowdown has reduced apartment demand, and with new

multifamily construction about unchanged, vacancies have risen and rents have softened. Provision of decent housing affordable to households of moderate or low incomes is a challenge even in strong economic times, and with the unemployment rate up nearly two percentage points since late 2000, affordability problems have increased for many, despite the softness in rents.

Despite the recent weakness in the apartment property market, the market for financing of apartments has grown to record volumes. The favorable long-term prospects for apartment investments, combined with record low interest rates, has kept investor demand for apartments strong and supported property prices. Refinancings too have grown, and credit quality has remained very high. Fannie Mae and Freddie Mac have been among those boosting volumes and introducing new programs to serve the multifamily market.

This section will review these market developments, interpret the performance of Fannie and Freddie within that market context, and discuss future prospects for the multifamily rental market, its financing, and the GSE role. The intention here is only to update the discussion from 2000. For general background information on the multifamily mortgage market and the GSEs, see the 2000 Rule and the HUD-sponsored research report, Study of Multifamily Underwriting and the GSEs' Role in the Multifamily Market (Abt Associates, 2001).

2. The Multifamily Rental Housing Market: 2000–2003

The definition of "good" market conditions in multifamily rental housing depends on one's perspective. Investors and lenders like low vacancies, steady rent increases, and rising property values. Developers like strong demand for new construction and favorable terms on construction financing. Consumers, in contrast, prefer low rents and a wide selection of available apartments.

The mid- to late-1990s were among the most successful of recent history, in that apartment market conditions were generally good for all of these interest groups. Investment returns were favorable, construction volumes were steady at sustainable levels, and many consumers had income gains in excess of their rent increases.

Market conditions for multifamily rental housing began to weaken toward the end of 2000. Early warnings came from the publicly traded apartment companies, some of which reported easing in demand growth in the first months of 2001, coinciding with a slowdown in job growth to its lowest level since 1992.

By the second quarter of 2001, most apartment market indicators were reflecting the slowdown. Vacancies were up, approaching 10 percent for all multifamily (5+ units in structure) rental housing, according to the Census Bureau, and about half that rate among the larger apartment properties monitored by private market research firms. The FDIC's Survey of Real Estate Trends detected the first signs of weakening in the first half of 2001, followed by a big falloff in second half of the year and a continuing slide in the first half of 2002.

Apartments—especially those serving the top end of the rental market—appear to have

¹⁸⁸ Temkin et al., 2002, p. 29.

¹⁸⁹For example, see Radian's product offerings at http://www.radiangroupinc.com.

¹⁹⁰ Vanessa Bush, "Risk-Based Pricing Trend Could Make Mortgage Lending More Efficient," *America's Community Banker*, October 1, 1998.

¹⁹¹ "Improving Credit Quality, Maturing Business Stoke Confidence in Subprime MBS Market," *Inside MBS & ABS*, published by Inside Mortgage Finance, February 21, 2003.

¹⁹² *Ibid*.

performed worse than other rental housing in the past four years, after several years of rent growth and occupancies surpassing the rental market averages. The multifamily vacancy rate has increased more than the overall rental market vacancy rate in each of the years 2000, 2002, and 2003. In 2001, the vacancy rates increased at an equivalent rate. For example, the Census Bureau's estimate of a 1.2 percentage point increase in vacancies for apartments in the year ending in the third quarter of 2003 exceeds the overall rental vacancy rate of .9%. Similarly, while rent growth has decelerated slightly for all rental housing according to the CPI, industry surveys of apartment rents show year-overyear declines in rents in many local markets.193 In 2003, asking rents remained flat nationally, as multifamily completions declined 5 percent.194

a. Apartment Demand and Supply

The primary reason for the softening in the multifamily rental market has been a reduction in the growth of consumer demand for apartment housing. The general slowdown in economic activity meant fewer apartment customers, with less money, than if the economy were vigorously expanding. Persistent low interest rates have also enticed renters into the home purchase market as evidenced by the U.S. homeownership rate, which grew to 68.4 percent in 2003, further contributing to a weakness in rental demand.

The reduced demand is most evident in the national statistics on employment. Job growth began decelerating in late 2000 and throughout 2001, turning negative late that year. The largest year-over-year job loss of the economic downturn occurred in February 2002, and year-over-year losses have continued through October 2003. Apartment demand seems particularly sensitive to labor market conditions, given the importance of rental housing to mobile individuals and families accepting new jobs or transfers. Reis, Inc., a real estate market research firm, estimates that the total number of occupied apartments (in properties with 40+ units) actually declined in both 2001 and 2002 in the large markets nationwide that are monitored by the company. 195

Households, not jobs, fill apartments, and for this reason household formations are a preferable indicator of demand for apartments as well as other types of housing. The Census Bureau estimates that the total number of renter households nationwide has been essentially unchanged at approximately 34.8 million since 1996. Yet during the late 1990s apartment demand was expanding, and apartments were apparently picking up market share from other rental housing. The past two or three years may have seen a reversal of that trend in share.

Long-term demographic trends are expected to be favorable for rental housing

demand. 196 The maturing of the "Baby Boom Echo" generation will increase the number of persons under age 25 who will seek rental housing, immigration is expected to continue to fuel demand for rental housing, and minority populations, while increasing their homeownership rates, are growing and will contribute to higher absolute demand for rental housing. Thus demographic trends support an improvement in the long-run demand for rental demand, which is likely to include higher multifamily rental demand.

Supply growth has been maintained, even though the current reduced multifamily demand warrants less new construction. Total multifamily starts (2+ units) have been running approximately 325-to-350 thousand annually for the past six years, according to Census Bureau statistics, adding about 1 percent annually to the total multifamily stock. Most of these new units are built for rental use, with only about 20 percent in recent years reported as being built as for-sale condominium units.

The reduced short-term demand has shown through in absorption speeds for new apartments. The percentage of newly completed unfurnished apartments rented within three months of completion fell from 71 percent during the first quarter of 2000 to 64 percent during the first quarter of 2001 and to 58 percent during the first quarter of 2002, according to the Census Bureau. This percentage rose slightly to 59 percent in the first quarter of 2003.

b. Performance by Market Segments

Some segments of the multifamily rental market have been more affected than others by the recent softening. As mentioned earlier, the top end of the apartment market seems especially hard hit, as measured by rising vacancies and reduced rent growth. This segment is particularly dependent on job growth and transfers for new customers, and is particularly vulnerable to losses of residents and prospective customers to home purchase. According to reports by apartment REITs and other investors, these top-end properties have not been getting the jobrelated in-movers, but have still been losing a lot of customers to home purchase. These properties generally have annual resident turnover rates of above 50 percent, and thus are particularly quickly influenced by changes in demand. Furthermore, this is the segment of the apartment market into which most of the new construction is built.

Performance has varied geographically as well. Some of the coastal markets, especially in Northern California, saw the double-digit rent increases of the late 1990s replaced by double-digit declines, before stabilizing more recently. "Supply constrained markets" had been preferred by apartment investors during the 1990s, but recent market performance has reminded investors and analysts that all markets have their day. For example, Houston posted the biggest year-over-year rent increase of any major apartment market in 2001, despite a long-run history of moderate rent growth and few barriers to new apartment construction. Rent changes in the

27 metropolitan markets for which estimates are available from the CPI ranged from a low of -0.3 percent to a high of 6.7 percent in the first half of 2003 relative to a year earlier. And across the 75 metropolitan areas for which rental vacancy rates (apartments plus other rentals combined) are available, rates for the year 2002 ranged from 2.4 percent to 15.4 percent, according to the Census Bureau. In a historical context, this variation is moderate, although up somewhat since the late 1990s.

Conditions in the "affordable" segment of the apartment market are harder to track than in the high-end segment because of lesser investor interest and analyst coverage. Data for the late 1990s analyzed by the National Housing Conference saw affordability problems continuing, although a study of apartment renters by the National Multi Housing Council saw some improvement in affordability during the strong economic growth of 1997-1999.197 Other work noted that rent to income ratios for the lowest income quintile of renters rose during the late 1990s even as these ratios were stable or declining for other renters. 198 Harvard's State of the Nation's Housing report for 2002 highlighted the variability of the affordability problem from place to place. 199

Little research is available on affordability trends since 1999. However, tabulations from the 2001 American Housing Survey indicate that income growth between 1999 and 2001 in the lowest quintile of renter households continued to lag that of higher income renters, and fell short of the average rent increases during this period. Together, these statistics suggest that affordability has deteriorated early this decade among at least this group of very low-income renters. Other work using the AHS found that the number of low-to moderate-income working families with severe rental cost burdens increased 24 percent between 1999 and 2001.²⁰⁰

The low-income housing tax credit (LIHTC) continues to finance much of the newly built multifamily rental housing that is affordable to households with moderate income. Restricted to households with incomes no greater than 60 percent of the local median, this program financed approximately 75,000 units in 2001, according to the National Council of State Housing Agencies, after running in the midto high-60 thousand range the previous three years. About 70 percent of these units are newly built, and the rest are renovations of existing units.

Expenditures for improvements to existing rental apartments have grown in recent years.

¹⁹³ See, for example, Marcus & Millichap Research Services, *National Apartment Report,* January 2003.

¹⁹⁴ Marcus & Millichap Research Services, *National Apartment Report,* January 2004.

¹⁹⁵ "Apartment Landlords Gather to Dreary Outlook for Sector," *Wall Street Journal*, January 15, 2003. Section B.

¹⁹⁶ Mortgage Bankers Association of America, "MBA News Link: Rental Market Demographics

[&]quot;Favorable," Report Says," January 2003.

¹⁹⁷ Center for Housing Policy/National Housing Conference, "Housing America's Working Families: A Further Exploration," *New Century Housing*, Vol. 3, No. 1, March 2002; Mark Obrinsky and Jill Meron, "Housing Affordability: The Apartment Universe," *National Multi Housing Council*, 2002.

¹⁹⁸ "Housing Affordability in the United States: Trends, Interpretations, and Outlook," a report prepared for the Millennial Housing Commission by J. Goodman, November, 2001.

¹⁹⁹ Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing, 2002.* ²⁰⁰ Center for Housing Policy/National Housing Conference, "America's Working Families and the Housing Landscape 1997–2001," *New Century Housing*, Vol. 3, No. 2, November 2002.

In 2001 the total of \$11.3 billion was nearly twice the figure of three years earlier, according to the Census Bureau, and more than a third as large as construction spending for newly built multifamily structures, including owner-occupied condos. Many of these improvements are to older properties in high-demand neighborhoods. Improvements to the physical structures have external benefits. But often the renovations are in connection with re-positionings that move the apartments into a higher rent range and bring changes in the demographic composition of the resident base.

In 2002, expenditures on total improvements to existing apartments declined to \$9.8 billion, while new construction spending increased \$2 billion. This shift further suggests a re-positioning to apartments with a higher rent range. Excluding units financed with tax credits or other subsidies, most of the multifamily rental construction in recent years has been targeted on the upper end of the market, often the only segment for which unsubsidized new construction is economically feasible. The median asking rent on new unfurnished apartments completed in 2001 was \$877, up 11 percent over the previous two years. In 2002 median asking rent for these properties was \$905. Of those units brought to market in 2002, 45 percent were at rents at or above \$950.

3. Multifamily Financing Trends

In contrast to the softening observed in the demand/supply balance for multifamily, mortgage financing of these properties has been at a record pace in the past three years.

a. Lending Volume

Total multifamily mortgage debt outstanding increased 9.5 percent in 2000 (Q4/Q4), 11.4 percent in 2001, and 8.6 percent in 2002, according to the Federal Reserve's Flow of funds accounts. This trend continued through the third quarter of 2003, which saw a 12.4 percent annualized increase. The dollar volumes were above those of any previous year, and far exceeded the lending volumes of all years other than 1998 and the frenzied period 1985–86. The pace has picked up slightly in 2003, with figures through the first two quarters indicating annualized growth of about 9 percent. Furthermore, a survey by the Mortgage Bankers Association of America shows that of 48 member firms surveyed, representing all large mortgage banking firms and a cross section of smaller mortgage companies, multifamily origination volume increased by 16 percent in 2002-from \$35 billion in 2001 to \$41 billion in 2002.

The apparent inconsistency between current market fundamentals and financing can be explained by low interest rates. The same financial forces that lowered the mortgage rates for home purchasers to record lows by 2002 also reduced the financing costs of multifamily properties. The ten year Treasury yield, a common benchmark for multifamily loan pricing, fell to a 45-year low of 3.3 percent in June 2003 from 6.3 percent as recently as the end of 1999.

Another feature boosting investor demand for apartment properties and the resulting demand for debt to finance those purchases

has been the lack of attractive returns on many financial assets and other alternative investments. Despite the current weak performance of apartments, investors apparently are looking through to the longrun outlook for these assets, which is generally thought to be favorable, as indicated most recently by investor surveys fielded by the Urban Land Institute and by LendLease and PriceWaterhouseCoopers. 201

The net change in mortgage debt outstanding is defined as loan originations less repayments and charge offs. As discussed in Appendix D, net change is a lower bound on originations. By all accounts, originations-for which no single source of estimates is available—are much higher than net change in most years. High levels of refinancings of existing multifamily mortgages in recent years has been a factor in originations exceeding the net change in debt outstanding.

Most mortgage lending is in the "conventional" market. Multifamily loan programs of the Federal Housing Administration accounted about \$7 billion in new insured mortgages in fiscal year 2003 up from \$6 billion in fiscal year 2002 and \$5 billion in fiscal 2001. Despite the recent increase in FHA originations, and the likely continued strong performance for FHA multifamily programs in the foreseeable future,202 FHA remains but a small portion of the total multifamily mortgage market. Outstanding FHA-insured multifamily mortgage debt was \$55 billion at the end of the first quarter of 2003—only about 11 percent of all multifamily mortgage debt outstanding.

Multifamily lending has been spurred by new apartment construction, property sales, and refinancings. New multifamily construction was valued at \$32.6 billion in 2002, according to the Census Bureau, up 14 percent from 2000. The number of new multifamily units completed over this period actually declined 6 percent, and the increased expenditures reflect higher costs per unit. The increase in asking rents described earlier suggests higher property values and greater debt carrying capacity.

b. Property Sales and Refinancings

Sales of existing apartment properties tend to be pro-cyclical. Increasing asset values bring buyers to the market and tempt sellers to realize their capital gains. In soft markets, in contrast, the bid-ask spread generally widens and the volume of sales declines, as sellers perceive current offers as beneath the property's long run value and buyers are reluctant to pay for past performance or the hope of future gains. Sales tend to increase mortgage debt, because the loan originated to finance the purchaser's acquisition is typically considerably larger than the mortgage retired by the seller.

No source of apartment property sales statistics matches the comprehensive national coverage of the single-family market provided by the National Association of

Realtors' monthly estimates. But surveys by the National Multi Housing Council and other apartment industry reports indicate that transactions volume dipped during 2001 and has since stabilized but not yet returned to the levels of the late 1990s. Even if the number of transactions is off, the dollar volume may well have risen, depending on the mix and prices of properties sold.

Mortgage lending volumes have recently been boosted by shifts in property ownership. Publicly traded real estate investment trusts had been the big gainers during most of the 1990s, and by 1999 owned nearly 6 percent of all apartments nationwide and a considerably larger share of all big (100+ unit) properties. But beginning in 1999 capital market developments made private buyers more competitive. Since then the number of apartments owned by large REITs has declined about 5 percent, with diverse private interests apparently picking up market share.

Private investors are able to use more leverage—greater debt—in financing their transactions than the market permits the public REITs. As a result, the very low mortgage rates recently have given them an advantage in bidding on properties. In addition, equity funding costs of REITs rose as their stock prices flattened or moved down as part of the broader equity market correction.

Refinancings have, by all accounts, also been strong. Despite the lockout provisions and yield maintenance agreements that constrain early refinancings of many multifamily loans, lenders reported very strong refinancing activity in 2001 and continuing into 2002. Although refinancing volume data for the entire market are not available, the trends in refinance volume for FHA and the GSEs show very strong increases in refinance activity during 2002 and 2003. For example, FHA's Section 223(a)(7) program, which is limited to refinancing of FHA multifamily mortgages, experienced an increase in origination volume of 133 percent in Fiscal Year 2003 and 181 percent in Fiscal Year 2002. (\$1.73 billion in FY 2003, \$0.74 billion in FY 2002, and \$0.26 billion in FY 2001). Similarly, the GSEs increased their combined volume of refinances by 83 percent from 1999-2000 to 2001-2002, from \$17.6 billion to \$32.1 billion. Refinancings, especially when motivated by a desire to lower interest expense rather than to extract equity, do not add as much to debt outstanding as do purchase loans, which often are much larger than the seller's existing mortgage that is repaid at the time of sale. Nonetheless, refinancings represent a significant part of all multifamily mortgage lending.

c. Sources of Financing and Credit Quality

The sources of funding of multifamily mortgages shifted somewhat in the past few years, judging from the Flow of Funds accounts. As shown in Table A.4, four categories of lenders have dominated multifamily mortgage lending since the mid-1990s. Of those four, commercial banks have played a lesser, although still substantial, role in recent years, providing 20 percent of the \$86 billion in net additional funding of multifamily mortgages during 2000 and 2001.

²⁰¹ Urban Land Institute, The ULI Forecast, 2002: Lendlease and Prive WaterhouseCoopers, Emerging Trends in Real Estate, 2003.

²⁰² Merrill Lynch, A New Look at FHA Prepayments and Defaults, September 2002.

The portfolio holdings of the GSEs, by contrast, have been much more important than during the last half of the 1990s. Mortgage backed securities, both from the GSEs and especially from other issuers, accounted for proportionally less of the

growth in 2000–01 than in 1995–99, but between them still accounted for nearly half of all the net credit extensions. Some slight broadening of the base of multifamily lending in the past two years, as these four lender groups accounted for only 85 percent of the

net credit extended in 2000 and 2001, compared to all of it in the previous five-year period.

BILLING CODE 4210-27-P

Table A.4

Providers of Net Additions to Multifamily Mortgage Debt Outstanding

(Percent distribution)

	2000-2001	1995-1999
Commercial Banks Fannie Mae/ Freddie Mac	20 %	27 %
Portfolio	15	2
MBS	18	25
Private MBS	17	32
All Others	30	14
Total	100 %	100 %
Memo: Aggregate Net Addition to Debt (\$ billions)	85.5	93.9

Sources: Federal Reserve Flow of Funds Accounts, OFHEO 2001 Annual Report.

The market values of apartment properties have generally held up well, although the most recent indicators suggest some flattening. Properties in the portfolios of pension funds continued to appreciate into the second half of 2002, according to the National Council of Real Estate Investment Fiduciaries, although at a reduced annual rate of less than 2 percent. And the sales price per square foot of "Class A" properties monitored by Global Real Analytics rose until turning down in early 2002, posting a 1.6 percent year over year decline in the second quarter.

The continuing value of collateral has helped keep loan quality high on multifamily mortgages. Delinquency rates from all major reporters are at or near record lows, and well below the rates reported for single-family mortgages and commercial properties. At commercial banks, the FDIC reports a noncurrent loan percentage of 0.38 in the second quarter of 2002. In life insurance company portfolios only .05 percent of residential mortgages were overdue at the end of 2002, and as of the third quarter of 2002 the GSEs were both reporting similarly miniscule delinquency rates of below 0.1 percent; all of these rates are below those of a year earlier.

Multifamily lenders have remained cautious in their underwriting and, together with their regulators, have avoided repeating the mistakes of the 1980s. Many of the senior loan officers surveyed quarterly by the Federal Reserve have reported tightening their terms on commercial mortgages, and that shift likely has occurred in their multifamily lending as well. Perhaps the best indicator of discipline in multifamily lending is the fact that, despite the strong apartment

demand during the last half of the 1990s, construction never rose above its long-run sustainable level, unlike the rampant overbuilding that plagued the industry in the mid- and late-1980s.

4. Recent GSE Involvement in Multifamily Finance

As the multifamily mortgage market has expanded since 1999, Fannie Mae and Freddie Mac have increased their lending, picked up market share, introduced new programs, and enhanced others.

Beginning with their whole loans, the GSEs added 34 percent to their combined holdings of multifamily loans in 2001, and another 26 percent in 2002 (see Table A.6 below). The growth in multifamily MBS volume was nearly as dramatic, increasing 26 percent in 2001 and another 14 percent in 2002. The gains resulted in the GSEs increasing their share (whole loans and securities combined) of all multifamily debt outstanding to 22.8 percent by the third quarter of 2003, up from 19 percent at year-end 2001, 15 percent at year-end 1999 and 11 percent at the end of 1995. By this combined measure of portfolio holdings and MBS outstanding, at year-end 2002 Fannie Mae had nearly twice (\$65 billion versus \$37 billion) the multifamily business of Freddie Mac, although Freddie was growing its multifamily business more rapidly (67 percent increase between 2000 and 2002, compared to 46 percent increase for Fannie Mae).

Measures that focus on new multifamily activity, specifically gross mortgage purchase volumes and new security issuance, vary across recent years and between the GSEs. For the GSEs combined, these measures of

current business activity show sharp gains of over 70 percent in 2001, following small decreases in activity in 2000. In 2002, the GSEs combined posted small declines for both measures. Measures of multifamily gross mortgage purchases and new security issuance diverged for the two GSEs in 2002. Fannie Mae experienced declines in these balance sheet and new business indicators in 2002 while Freddie Mac experienced gains, particularly in new security issuance. As discussed earlier, the credit quality of GSE multifamily loans has remained very high even with the large gains in loan volume.

Despite the substantial pickup in GSE multifamily activity, the position of these companies in the multifamily mortgage market remains well below their dominance in single-family mortgage finance. At the end of 2002, the GSEs' market share of single family debt outstanding was 44 percent, twice the share of multifamily debt held or securitized by these two companies, according to Federal Reserve statistics. Furthermore, the multifamily share of all housing units financed by the GSEs combined has declined from its 1997 level (Table A.5), although the annual statistics are heavily influenced by the volume of refinancings in the single-family market, which spiked in 1998 and again in 2001 and 2002 in response to the big decline in mortgage rates in those years. Because of lock-out agreements and other loan covenants, multifamily loans are not as prone to rate-induced refinancings as are singlefamily mortgages.

BILLING CODE 4210-27-P

Table A.5

Multifamily Share of All Housing Units Financed

	ਾਰ	Multifamily	Share	11.4%	9.6%	8.9%	11.4%	6.6%	7.3%
	GSEs Combined		Total	3,101,673	6,426,404	5,438,685	3,970,692	8,274,936	10,914,592
	35	:	Multifamily	352,535	615,664	485,678	453,471	819,777	794,435
Units Financed		Multifamily	Share	8.2%	8.1%	8.2%	9.8%	9.3%	7.3%
	Freddie Mac		Total	1,213,126	2,718,565	2,328,800	1,677,295	3,381,036	4,552,277
			Multifamily	99,470	221,319	191,492	163,580	315,868	333,038
		Multifamily	Share	13.4%	10.6%	9 5%	12.6%	10.3%	7.3%
	Fannie Mae		Total	1,888,547	3,707,839	3,109,885	2,293,397	4,893,900	6,362,315
		:	Multifamily	253,065	394,345	294,186	289,891	503,909	461,397
		;	Year	1997	1998	1999	2000	2001	2002

Source: GSE Annual Housing Activity Reports, Table 1; figures for 2001 are adjusted for REMIC weights and participations.

a. Contrasting Business Models

While both Fannie Mae and Freddie Mac have significantly increased their multifamily activities in recent years, they have pursued distinct business models in achieving that growth. As shown in Table A.6, most of Fannie Mae's multifamily growth has come in MBS products, whereas Freddie Mac has relied more on loans purchased and held in its portfolio. At the end of 2002, Fannie Mae

had almost four dollars of outstanding MBSs for every dollar of portfolio holdings. Freddie Mac, on the other hand, more than three times as much volume in portfolio as it had in MBS outstanding.

Table A.6

GSE Multifamily Mortgage Activity, 1998-2002
(\$ millions)

	1998	1999	2000	2001	2002
Fannie Mae	-				
MF Whole Loans in Portfolio	8,185	7,911	8,361	10,538	13,571
% Change From Previous Year		-3.3%	5.7%	26.0%	28.8%
MF MBS Outstanding	28,535	32,221	35,987	44,909	51,111
% Change From Previous Year	,	12.9%	11.7%	24.8%	13.8%
MF Purchases (Cash + Securitizations)	11,428	10,012	10,377	19,131	16,611
% Change From Previous Year		-12.4%	3.6%	84.4%	-13.2%
MF MBS Issuance	11,028	8,497	7,596	13,801	12,338
% Change From Previous Year		-23.0%	-10.6%	81.7%	-10.6%
Freddie Mac					
MF Whole Loans in Portfolio	7,978	12,355	16,369	22,483	28,036
% Change From Previous Year		54.9%	32.5%	37.4%	24.7%
MF MBS Outstanding	N/A	4,462	5,708	7,476	8,780
% Change From Previous Year			27.9%	31.0%	17.4%
MF Purchases (Cash + Securitizations)	3,910	7,181	6,030	9,509	10,656
% Change From Previous Year		83.7%	-16.0%	57.7%	12.1%
MF MBS Issuance	937	2,045	1,786	2,356	3,596
% Change From Previous Year		118.2%	-12.7%	31.9%	52.6%
Combined					
MF Whole Loans in Portfolio	16,163	20,266	24,730	33,021	41,607
% Change From Previous Year		25.4%	22.0%	33.5%	26.0%
MF MBS Outstanding	N/A	36,683	41,695	52,385	59,891
% Change From Previous Year			13.7%	25.6%	14.3%
MF Purchases (Cash + Securitizations)	15,338	17,193	16,407	28,640	27,267
% Change From Previous Year		12.1%	-4.6%	74.6%	-4.8%
MF MBS Issuance	11,965	10,542	9,382	16,157	15,934
% Change From Previous Year	,	-11.9%	-11.0%	72.2%	-1.4%

Source: Calculated from tables in OFHEO 2001 Annual Report.

The differing emphasis on portfolio holdings and securities issuance is related to the GSEs' contrasting approaches to credit underwriting. ²⁰³ Fannie Mae has long had risk-sharing arrangements with its multifamily loan originators, and currently has over 25 Delegated Underwriters and Servicers who are authorized to originate loans meeting Fannie Mae's requirements for sale to the GSE without prior approval of individual transactions. These "DUS" lenders retain part of the credit risk on the loans sold to Fannie.

Freddie Mac has taken a different approach to credit underwriting. In the wake of large credit losses on its multifamily business in the late 1980s and 1990, Freddie Mac essentially withdrew from the market. When it re-entered in late 1993, the company elected to retain all underwriting in-house and not delegate this function to the loan originators participating in Freddie Mac's Program Plus network. Because Freddie

assumes the entire credit risk on loans it purchases, some commercial banks and other financial institutions desiring to remove multifamily loans and all related liabilities from their books find Freddie's program preferable.

b. Affordable Multifamily Lending

Because most of the GSEs' multifamily lending is on properties affordable to households with low- or moderate incomes, financing of affordable multifamily housing by the GSEs has increased almost as much as their total multifamily lending. Approximately 86 percent of Fannie Mae's multifamily lending volume in 2002 qualified as affordable to low- or moderate income households, according to Fannie Mae's annual Housing Activity Report, as did 93 percent of Freddie Mac's multifamily units financed. For the entire multifamily rental market, HUD estimates that 90 percent of all housing units qualify as affordable to families at 100 percent of the area median, the standard upon which the low- and moderate-income housing goal is defined.

Owing to this high propensity to qualify as affordable lending, financing of multifamily rental housing is especially important for the GSEs attainment of their affordable housing goals. Less than 8 percent of the units financed by the GSEs in 2002 were multifamily rentals, as described above. Yet 15 percent of the units qualifying as low- and moderate-income purchases were multifamily, according to Table 1 of the GSEs' activity reports for 2002.

The GSEs increased the volume of their affordable multifamily lending dramatically in 2001, the first year of the new, higher affordable housing goals set for the GSEs. As measured by number of units financed, the total affordable lending (shown in the "low-mod total" rows of Table A.7) more than doubled from a year earlier, especially after application of the upward adjustment factor authorized for Freddie Mac in the 2000 Rule. In 2002, the GSEs maintained a high volume of affordable multifamily lending with Fannie Mae showing a slight decrease and Freddie Mac a slight increase.

²⁰³ "No Mistaking GSEs for Twins in Multifamily," *American Banker*, October 2, 2002.

Table A.7

Multifamily Units Financed

	1998	1999	2000	2001	2002	Source
Fannie Mae						
Total	393,397	294,091	289,509	503,909	461,397	1
Percent Change		-25%	-2%	74%	-8%	
Small	64,753	12,351	7,196	37,449	77,485	2
Large	328,644	281,740	282,312	466,460	383,912	2
Low-Mod Total	334,042	274,026	266,410	463,655	416,905	3
Percent Change		-18%	-3%	74%	-10%	
Small	52,508	10,017	6,244	32,732	67,892	3
Large	281,534	264,009	260,166	430,923	349,012	3
Underserved Areas Total	170,488	110,532	107,603	228,960	203,491	3
Percent Change		-35%	-3%	113%	-11%	
Small	43,133	5,879	4,042	23,794	50,204	3
Large	127,356	104,653	103,561	205,166	153,287	3
Special Affordable Total	180,726	164,068	147,641	267,513	241,359	3
Percent Change		-9%	-10%	81%	-10%	
Small	33,256	5,832	4,450	19,771	39,548	3
Large	147,470	158,236	143,191	247,742	201,811	3
Freddie Mac						
Total	221,319	191,492	163,580	315,370	333,038	1
Percent Change		-13%	-15%	93%	6%	
Small	10,244	4,068	2,996	50,492	44,039	2
Large	211,075	187,424	160,584	264,878	288,999	2
Low-Mod Total	211,760	172,417	151,166	294,875	298,134	3
Percent Change		-19%	-12%	95%	1%	
Small	9,421	3,322	2,621	48,062	40,563	3
Large	202,339	169,095	148,545	246,813	257,570	3
Underserved Areas Total	96,431	69,175	58,758	145,068	153,930	3
Percent Change		-28%	-15%	147%	6%	
Small	5,881	2,059	1,833	43,252	41,023	3
Large	90,550	69,175	56,924	101,817	112,907	3
Special Affordable Total	120,776	82,982	79,375	168,753	159,680	3
Percent Change		-31%	-4%	113%	-5%	
Small	5,785	1,526	1,636	36,600	28,245	3
Large	114,991	81,455	77,739	132,153	131,436	3

Sources: 1. Tables 15a, 15b of Summary Tables for 1993-2000 on HUD User web site for 2001, Annual Housing Activity Report Table 1.

Totals for 2001 are the "adjusted" totals from Annual Housing Activity Report Table 1 exclusive of adjustments for bonuses and Freddie Mac's Temporary Adjustment Factor.

^{2.} For 1998-99, Table 4 of Summary Tables for 1993-2000 on HUD User web site for 2001, Annual Housing Activity Report Table 1.

^{3.} For 1998-99, Table 4 of Summary Tables for 1993-2000 on HUD User web site totals for 1998-99 calculated as sum of small and large for 2000-2001, Annual Housing Activity Report Table 1.

The figures in Table A.7 are exclusive of the "Temporary Adjustment Factor (TAF)" granted to Freddie Mac as part of the 2000 Rule. The TAF was a response to Freddie Mac's limited opportunities for refinancing business because of its minimal involvement in the multifamily market in the early and mid-1990s. ²⁰⁴ The TAF, which expired at the end of 2003, provided a 20 percent upward adjustment to multifamily units in properties with 50 or more units, for purposes of the affordable housing goals.

Multifamily financing made major contributions not only to the GSEs attainment of the overall goal for affordable lending in 2002, but also to the "underserved areas" goal and "special affordable" goal. As shown in Table A.7, the 2001 increases in lending in each of these categories were substantial at both Fannie Mae and Freddie Mac, again leveling off for both in 2002. The GSEs also met the special multifamily affordable subgoal set in the 2000 Rule in both 2001 and 2002.

c. Multifamily Initiatives of the GSEs

Fannie Mae and Freddie Mac have taken a number of steps since 2000 to expand their multifamily lending and to respond specifically to the goals established in the 2000 Rule. These initiatives are summarized in the annual activity reports filed by the GSEs.²⁰⁵

One focus of the 2000 Rule was on lending to small (5-to-50 units) multifamily properties, which the Rule identified as an underserved market. HUD-sponsored research has found that the supply of mortgage credit to small properties was impeded by the substantial fixed costs of multifamily loan originations, by owners' insufficient documentation of property income and expense, and by the limited opportunities for fees for underwriting and servicing small loans. 206 As a result, many multifamily lenders focus on larger properties, which were found to have more loan products available to them and to pay lower interest rates than did small properties.

In an attempt to promote the supply of credit to small properties, the 2000 Rule provided incentives for the GSEs to step up their involvement in this segment of the multifamily mortgage market. The incentives likely contributed to the huge increases in small property lending posted by both Fannie Mae and Freddie Mac in 2001 and continuing into 2002 (Table A.7). The combined total of these units financed in 2001 and 2002 was almost 8 times those financed in the previous two years. This lifted the percentage of all GSE multifamily lending that was on small properties to their highest levels ever.

Programs introduced or enhanced by the GSEs in the past two years have contributed

to these striking numerical results. Delegated Underwriting and Servicing (DUS) is Fannie Mae's principle product line for purchasing individual multifamily loans. This product line is offered through 26 lenders with expertise in financing multifamily properties. In 2002, 92% of the DUS loan activity served affordable housing needs, 41% of DUS loans in underserved markets, and 51% addressed "special affordable" needs.²⁰⁷ Fannie Mae markets its specialized 3MaxExpress product line for loans worth less than or equal to \$3 million. This program helped secure \$4.1 billion in financing since 2001, which has assisted 130,000 families living in small multifamily properties.²⁰⁸ Fannie Mae additionally has federal Low-Income Housing Tax Credit (LIHTC) programs and special financing projects for special use properties such as Seniors Housing.209

During 2002, Freddie Mac used innovative financing structures combined with prudent, flexible multifamily lending practices, which were targeted at affordable initiatives through its Program Plus network of lenders resulting in record levels of multifamily mortgage purchases. The GSEs face strong competition in this market from small banks and other depository institutions that prefer to hold these loans in their own portfolios.²¹⁰

The 2000 Rule discussed other ways in which the GSEs might help promote financing of affordable multifamily housing. Two of those were lending for property rehabilitation and leadership in establishing standards for affordable multifamily lending. Many affordable properties are old and in need of capital improvements if they are to remain in the housing stock. Rehabilitation lending is a specialized field, and one in which the GSEs for a variety of reasons have not been major players. Less than 1 percent of all GSE multifamily lending in 2002 was for property rehabilitation. In 2002, Fannie Mae hosted its first ever Preservation Advisory Meeting with leaders in the housing and real estate finance industry to identify best practices and formulate real world solutions to this critical policy issue.211

Setting standards for affordable multifamily lending was identified in the 2000 Rule as another area where the GSEs could provide greater leadership. It was also noted, based on HUD-sponsored research underway at that time, 212 that market participants believe the GSEs to be conservative in their approaches to affordable property lending and underwriting. Actions described in the GSEs' annual activity reports

for 2001 and 2002 indicate attempts by the GSEs to promote market standards that will reduce the transactions costs of multifamily lending while also providing programs that have the flexibility needed to deal with unique circumstances.

5. Future Prospects

The outlook for the multifamily rental housing market is marked by near-term risks and longer-run optimism, according to most observers. The prospects for the next few quarters are dominated by the macroeconomy. In particular, job growth, with its implications for formations of households, will be a key for the resumption of growth in apartment demand. Many forecasters would ascribe to the Federal Reserve's forecast of a slight increase in GDP growth to 4.3 percent in 2004,213 while also agreeing with the Fed's warning that "An unusual degree of uncertainty attends the economic outlook at present, in large measure, but not exclusively, because of potential geopolitical developments." 214

When consumer demand does pick up, recovery should be reasonably fast. While the recent production levels have outpaced demand, they have been near the middle of the long run historical range and very close to the average of the last half of the 1990s. Judging from the firm tone to rents and vacancies during that period, total multifamily completions production of 275,000 to 350,000 units is a sustainable level of annual production—that is, the level consistent with long run demographic trends and replacement of units lost from the stock.

Because new construction has remained moderate, there is no massive overhang of product that will need to be absorbed. With increased demand, vacancies should fall and rents firm reasonably promptly. A key assumption behind this forecast for vacancies and rents is that new apartment construction not rise appreciably from its current level.

Recovery in the apartment market may also, perversely, be promoted by the recent unprecedented strength of the single-family market. Typically, economic recoveries bring strong growth in single-family housing demand, some of that coming from apartment renters seeking more space. With single-family activity already near record highs, boosted by historically low mortgage interest rates and despite the recently soft economy, it is uncertain how much higher single-family demand—and the accompanying losses of apartment customers to homeownership—can go.

Whenever the recovery comes, it will put the multifamily rental market back onto a long-run path that appears to promise sustained, moderate growth. As discussed in the 2000 Rule, the demographic outlook is favorable for apartment demand. Even if the homeownership rate increases further and the total number of renter households grows only slowly, as described in the discussion of the single-family housing market earlier in this Rule, apartment demand can be expected

²⁰⁵ Fannie Mae's 2002 Annual Housing Activities Report, pages 24–27; Freddie Mac's Annual Housing Activities Report for 2002, pages 41–47.

²⁰⁶ Abt Associates Inc., *An Assessment of the Availability and Cost of Financing for Small Mulifamily Properties*, a report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research, August 2001

²⁰⁷ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, p. 25.

²⁰⁸ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, p. 25.

 $^{^{209}}$ Fannie Mae, 2002 Annual Housing Activities Report, 2003, p. 26–27.

²¹⁰ "Fannie Courting Multifamily Sellers; Small Banks Balking," *American Banker*, January 13, 2003

 $^{^{211}\,\}mathrm{Fannie}$ Mae, 2002 Annual Housing Activities Report, 2003, p. 27.

²¹² Abt Associates, "Study of Multifamily Underwriting and the GSEs' Role in the Multifamily Market," Final Report to the U.S. Department of Housing and Urban Development, Office of Policy Development and Research, August 2001.

 $^{^{213}\,\}mbox{Federal}$ Reserve, Survey of Professional Forecasters, November 2003.

²¹⁴Board of Governors of the Federal Reserve System, *Monetary Policy Report to the Congress*, February 11, 2003, page 4.

to increase more rapidly than that for other rental housing, owing to the likely changes in age composition and reductions in average household size. One estimate projects the annual growth in apartment households to be one percent.²¹⁵

a. The Outlook for Multifamily Housing Supply

Regarding supply, one of the secrets of the success of the multifamily sector during the 1990s was that production never rose above its long-run sustainable level. The discipline of developers, investors, and their lenders that brought that result needs to be continued if the apartment market is to maintain stability.

Multifamily housing may benefit in the future from more favorable public attitudes and local land use regulation. Higher density housing is a potentially powerful tool for preserving open space, reducing sprawl, and promoting transportation alternatives to the automobile. The recently heightened attention to these issues may increase the acceptance of multifamily rental construction to both potential customers and their prospective neighbors.

Provision of affordable housing will continue to challenge suppliers of multifamily rental housing and policy makers at all levels of governments. Low incomes combined with high housing costs define a difficult situation for millions of renter households. Housing cost reductions are constrained by high land prices and construction costs in many markets. Government action—through land use regulation, building codes, and occupancy standards—are major contributors to those high costs, as is widely recognized by market participants, including the leaders of the GSEs.²¹⁶ Reflecting the preferences of the electorate, these regulated constraints are unlikely to change until voter attitudes change.

b. The Future Role of the GSEs

Regarding the mortgage financing of multifamily rental apartments, it is hard to anticipate events that might disrupt the flow or alter the sources of mortgage credit to apartments. In the past, certain events have triggered such changes—notably the savings and loan debacle of the 1980s and Freddie Mac's withdrawal from the market following large losses in the early 1990s-but these are, by definition, surprises. The current structure and performance of the multifamily mortgage market provide some comfort that the risks are slight. The lender base is not overly dependent on any one institution or lender type for either loan originations or funding. Lending discipline appears to have been maintained, given the low mortgage delinquency rates even during the weak economy of the past two years. The near term

outlook of most market participants is for ample supply of mortgage financing at historically low interest rates.²¹⁷ Yet complacency would be a mistake.

Responding to both market incentives and their public charters, Fannie Mae and Freddie Mac can be expected to build on their recent records of increased multifamily lending and continue to be leaders in financing volumes, in program innovations, and in standards setting. Certainly there is room for expansion of the GSEs' share of the multifamily mortgage market, which, as mentioned earlier, is by the measure of dollar volume outstanding currently only about half the market share enjoyed by the GSEs in single-family lending. And from the perspective of units financed, the statistics from Table A.5 combined with data from the 2001 American Housing Survey indicate that, while the GSEs financed 7.2 percent of all the nation's year-round housing units that year, the percentage of multifamily rental units (that is renter-occupied units and vacant rental units in structures with at least five units) was only 5.7 percent.

The sharp gains since 2000 in small property lending by Fannie Mae and Freddie Mac demonstrate that it is feasible for this important segment of the affordable housing market to be served by the GSEs. Building on the expertise and market contacts gained in the past three years, the GSEs should be able to make even greater in-roads in small property lending, although the challenges noted earlier will continue.

The GSEs' size and market position between loan originators and mortgage investors makes them the logical institutions to identify and promote needed innovations and to establish standards that will improve market efficiency. As their presence in the multifamily market continues to grow, the GSEs will have both the knowledge and the "clout" to push simultaneously for market standardization and for programmatic flexibility to meet special needs and circumstances, with the ultimate goal of increasing the availability and reducing the cost of financing for affordable and other multifamily rental properties.

E. Factor 3: Performance and Effort of the GSEs Toward Achieving the Low- and Moderate-Income Housing Goal in Previous Years

This section first discusses each GSE's performance under the Low- and Moderate-Income Housing Goal over the 1996–2002 period.²¹⁸ The data presented are "official results"—*i.e.*, they are based on HUD's analysis of the loan-level data submitted to the Department by the GSEs and the counting provisions contained in HUD's regulations in 24 CFR part 81, subpart B. As explained below, in some cases these "official results" differ from goal performance reported by the GSEs in the Annual Housing Activities Reports (AHARs) that they submit to the Department.

The main finding of this section concerning the overall housing goals is that both Fannie Mae and Freddie Mac surpassed the Department's Low- and Moderate-Income Housing Goals for each of the seven years during this period. Specifically:

• The goal was set at 40 percent for 1996; Fannie Mae's performance was 45.6 percent and Freddie Mac's performance was 41.1 percent.

- The goal was set at 42 percent for 1997–2000. Fannie Mae's performance was 45.7 percent in 1997, 44.1 percent in 1998, 45.9 percent in 1999, and 49.5 percent in 2000; and Freddie Mac's performance was 42.6 percent in 1997, 42.9 percent in 1998, 46.1 percent in 1999, and 49.9 percent in 2000.
- In the October 2000 rule, the low- and moderate-income goal was set at 50 percent for 2001-03. As of January 1, 2001, several changes in counting provisions took effect for the low- and moderate-income goal, as follows: "bonus points" (double credit) for purchases of goal-qualifying mortgages on small (5–50 unit) multifamily properties and, above a threshold level, mortgages on 2-4 unit owner-occupied properties; a "temporary adjustment factor" (1.20 units credit, subsequently increased by Congress to 1.35 units credit) for Freddie Mac's purchases of goal-qualifying mortgages on large (more than 50 units) multifamily properties; changes in the treatment of missing data; a procedure for the use of imputed or proxy rents for determining goal credit for multifamily mortgages; and eligibility of purchases of certain qualifying government-backed loans to receive goal credit. These changes are explained below. Fannie Mae's low-mod goal performance was 51.5 percent in 2001 and 51.8 percent in 2002, and Freddie Mac's performance was 53.2 percent in 2001 and 51.4 percent in 2002, thus both GSEs surpassed this higher goal in both years. This section discusses the October 2000 counting rule changes in detail below, and provides data on what goal performance would have been in 2001-02 without these changes.219

After the discussion of the overall housing goals in Sections E.1 to E.5, Sections E.6 to E.12 examine the role of the GSEs in funding home purchase loans for lower-income borrowers and for first-time homebuyers. A summary of the main findings from that analysis is given in Section E.6. Section E.13 then summarizes some recent studies on the GSEs' market role and section E.14 discusses the GSEs' role in the financing of single-family rental properties.

1. Performance on the Low- and Moderate-Income Housing Goal in 1996–2002

HUD's December 1995 rule specified that in 1996 at least 40 percent of the number of units financed by each of the GSEs that were eligible to count toward the Low- and Moderate-Income Goal should qualify as low-or moderate-income, and at least 42 percent of such units should qualify in 1997–2000. HUD's October 2000 rule made various

²¹⁵ Jack Goodman, "The Changing Demography of Multifamily Rental Housing," *Housing Policy Debate*, Winter 1999.

²¹⁶ Remarks by Franklin D. Raines, Chairman and CEO, Fannie Mae, to the Executive Committee of the National Association of Home Builders, January 18, 2003. See also Edward Glaeser and Joseph Gyourko, "The Impact of Zoning on Housing Affordability," Working Paper 8835, National Bureau of Economic Research, March 2002.

²¹⁷ "Capital Markets Outlook 2003," *Apartment Finance Today*, Vol. 7, No. 1 (January/February 2003).

 $^{^{218}\}mbox{Performance}$ for the 1993–95 period was discussed in the October 2000 rule.

²¹⁹ To separate out the effects of changes in counting rules that took effect in 2001, this section also compares performance in 2001 to estimated performance in 2000 if the 2001 counting rules had been in effect in that year.

changes in the goal counting rules, as discussed below, and increased the Low- and Moderate-Income Goal to 50 percent for 2001–03.

Table A.8 shows low-mod goal performance over the 1996–2002 period, based on HUD's analysis. The table shows that Fannie Mae surpassed the goals by 5.6 percentage points and 3.7 percentage points in 1996 and 1997, respectively, while Freddie Mac surpassed the goals by narrower margins, 1.1 and 0.6 percentage points. During the heavy refinance year of 1998, Fannie Mae's performance fell by 1.6 percentage points, while Freddie Mac's performance rose slightly, by 0.3 percentage

point. Freddie Mac showed a gain in performance to 46.1 percent in 1999, exceeding its previous high by 3.2 percentage points. Fannie Mae's performance in 1999 was 45.9 percent, which, for the first time, slightly lagged Freddie Mac's performance in that year.

Table A.8

GSEs' Performance on the Low- and Moderate-Income Housing Goal, 1996-2002

	9661	1997	1998	1999	2000	2001*	2002*
Low-and Moderate-Income Goal	40%	42%	42%	42%	42%	20%	20%
Fannie Mae: Units Eligible to Count Toward Goal	1,831,690	1,710,530	3,468,428	2,925,347	2,130,686	4,541,456	5,848,788
Low- and Moderate-Income Units	834,393	782,265	1,530,308	1,343,396	1,054,349	2,340,179	3,028,959
Percent Low- and Moderate-Income	45.6%	45.7%	44.1%	45.9%	49.5%	51.5%	51.8%
Freddie Mac: Units Eligible to Count Toward Goal	1,293,424	1,173,915	2,654,850	2,224,849	1,578,236	3,238,783	4,275,958
Low- and Moderate-Income Units	532,219	499,590	1,137,660	1,024,660	788,324	1,723,699	2,199,228
Percent Low- and Moderate-Income	41.1%	42.6%	42.9%	46.1%	49 9%	53 2%	51 4%

* Performance in 2001-2002 not directly comparable with performance in 1996-2000 due to changes in goal counting rules, as discussed in text, and shown in Table A.9.

Both GSEs exhibited sharp gains in goal performance in 2000—Fannie Mae's performance increased by 3.6 percentage points, to a record level of 49.5 percent, while Freddie Mac's performance increased even more, by 3.8 percentage points, which also led to a record level of 49.9 percent. Fannie Mae's performance was 51.5 percent in 2001 and 51.8 percent in 2002; Freddie Mac's performance was 53.2 percent in 2001 and 51.4 percent in 2002. However, as discussed below, using consistent accounting rules for 2000–02, each GSE's performance in 2001–02 was below its performance in 2000.

The official figures for low-mod goal performance presented above differ from the corresponding figures presented by Fannie Mae and Freddie Mac in their Annual Housing Activity Reports to HUD by 0.2-0.3 percentage point in both 1996 and 1997. reflecting minor differences in the application of counting rules. These differences also persisted for Freddie Mac for 1998-2000, but the goal percentages shown above for Fannie Mae for these three years are the same as the results reported by Fannie Mae to the Department. Fannie Mae reported its performance in 2001 as 51.6 percent and Freddie Mac reported its performance as 53.6 percent-both were slightly above the corresponding official figures of 51.5 percent and 53.4 percent, respectively. For 2002, Fannie Mae's reported performance was the same as reported by HÛD (51.8 percent), while Freddie Mac's reported performance was 51.3 percent, slightly below HUD's official figure of 51.4 percent.

Fannie Mae's performance on the Low- and Moderate-Income Goal was in the range between 44 percent and 46 percent between 1996 and 1999, but jumped sharply in just one year, from 45.9 percent in 1999 to 49.5 percent in 2000. Freddie Mac's performance was in the range between 41 percent and 43 percent between 1996 and 1998, and then rose to 46.1 percent in 1999 and 49.9 percent in 2000. As discussed above, official performance rose for both GSEs in 2001–02, but this was due to one-time changes in the counting rules—abstracting from counting rule changes, performance fell for both GSEs.

Fannie Mae's performance on the Low- and Moderate-Income Goal surpassed Freddie Mac's in every year through 1998. This pattern was reversed in 1999, as Freddie Mac surpassed Fannie Mae in goal performance for the first time, though by only 0.2 percentage point. This improved relative performance of Freddie Mac was due to its increased purchases of multifamily loans, as it re-entered that market, and to increases in the goal-qualifying shares of its single-family mortgage purchases. Freddie Mac's performance also slightly exceeded Fannie Mae's performance in 2000, 49.9 percent to 49.5 percent. Freddie Mac's official performance also exceeded Fannie Mae's official performance in 2001, but this reflected a difference in the counting rules applicable to the two GSEs that was enacted by Congress; if the same counting rules were applied to both GSEs (that is, Freddie Mac did not receive the 1.35 Temporary Adjustment Factor), Fannie Mae's performance would have exceeded Freddie Mac's performance, by 51.5 percent to 50.5 percent.

In 2002, Freddie Mac's performance on the low mod-goal (51.4 percent) fell short of Fannie Mae's performance (51.8 percent), even though Freddie Mac had the advantage of the Temporary Adjustment Factor. The gap would have been wider without this factor, and in fact Freddie Mac's performance would have been short of the goal, at 49.2 percent.

2. Changes in the Goal Counting Rules for 2001–03

A number of changes in the counting rules underlying the calculation of low- and moderate-income goal performance took effect beginning in 2001, as follows:

- Bonus points for multifamily and single-family rental properties. During the 2001–03 period the Department awarded "bonus points" (double credit in the numerator) for goal-qualifying units in small (5–50 unit) multifamily properties and, above a threshold, 2–4 unit owner-occupied properties whose loans were purchased by the GSEs. By letters dated December 24, 2003, the Department notified the GSEs that these bonus points would not be in effect after December 31, 2003.
- Freddie Mac's Temporary Adjustment Factor. As part of the Consolidated Appropriations Act of 2000, Congress required the Department to award 1.35 units of credit for each unit financed in "large" multifamily properties (i.e., those with 51 or more units) in the numerator in calculating performance on the housing goals for Freddie Mac for 2001–03.²²⁰ This "temporary adjustment factor" (TAF) did not apply to goal performance for Fannie Mae during this period. By letters dated December 24, 2003, the Department notified Freddie Mac that this factor would not be in effect after December 31, 2003.
- · Missing data for single-family properties. In the past, if a GSE lacked data on rent for rental units or on borrower income for owner-occupied units in single-family properties whose mortgages it purchased, such units were included in the denominator, but not in the numerator, in calculating goal performance. Since some of these units likely would have qualified for one or more of the housing goals, this rule lowered goal performance. Under the new counting rules for the low- and moderateincome goal and the special affordable goal that took effect in 2001, the GSEs are allowed to exclude loans with missing borrower income from the denominator if the property is located in a below-median income census tract. This exclusion is subject to a ceiling of 1 percent of total owner-occupied units financed. The enterprises are also allowed to exclude single-family rental units with missing rental information from the denominator in calculating performance for these two goals; there is no ceiling or restriction to properties located in belowmedian income census tracts for this exclusion of single-family rental units. No single-family loans can be excluded from the denominator in calculating performance on the underserved areas goal—that is, if a GSE does not have sufficient information to

- determine whether or not a property is located in an underserved area, all units in such a property are included in the denominator, but not in the numerator, in calculating performance on this goal.
- · Missing data and proxy rents for multifamily properties. In the past, if a GSE lacked data on rent for rental units in multifamily properties whose mortgages it purchased, such units were included in the denominator, but not in the numerator, in calculating goal performance. Since some of these units likely would have qualified for one or more of the housing goals, this rule lowered goal performance. Under the new counting rules that took effect in 2001, if rent is missing for multifamily units, a GSE may estimate "proxy rents," and, up to a ceiling of 5 percent of total multifamily units financed, may apply these proxy rents in determining whether such units qualify for the low- and moderate income goal and special affordable goal. If such proxy rents cannot be estimated, these multifamily units are excluded from the denominator in calculating performance under these goals. No multifamily loans can be excluded from the denominator in calculating performance on the underserved areas goal—that is, if a GSE does not have sufficient information to determine whether or not a property is located in an underserved area, all units in such a property are included in the denominator, but not in the numerator, in calculating performance on this goal.
- · Purchases of certain government-backed loans. Prior to 2001, purchases of government-backed loans were not taken into account in determining performance on the GSEs' low- and moderate-income and underserved area housing goals. That is, all such loans were excluded from both the numerator and the denominator in calculating goal performance on these two goals, and in accordance with Section 1333(b)(1)(A) of the Federal Housing **Enterprises Financial Safety and Soundness** Act of 1992, purchases of only certain government-backed loans were included in determining performance on the GSEs special affordable goals. In October 2000 the Department took steps to encourage the enterprises to play more of a role in the secondary market for several types of government-backed loans where it appeared that greater GSE involvement could increase the liquidity of such mortgages. Home equity conversion mortgages (HECMs) were developed in the late-1980s by the Federal Housing Administration (FHA); these mortgages allow senior citizens to draw on the equity in their homes to obtain monthly payments to supplement their incomes. Thus purchases of FHA-insured HECMs now count toward the low- and moderate-income housing goals if the mortgagor's income is less than median income for the area. Similarly, purchases of mortgages on properties on tribal lands insured under FHA's Section 248 program or HUD's Section 184 program may qualify for the GSEs housing goals. And purchases of mortgages under the Rural Housing Service's Single Family Housing Guaranteed Loan Program

 $^{^{220}\}mathrm{See}$ Congressional Record, December 15, 2000, pp. H12295–96.

may also count toward all of the housing goals. $^{\rm 221}$

3. Effects of Changes in the Counting Rules on Goal Performance in 2001–02

Because of the changes in the low- and moderate-income goal counting rules that took effect in 2001, direct comparisons between official goal performance in 2000 and 2001–02 are somewhat of an "apples-to-oranges comparison." For this reason, the Department has calculated what performance would have been in 2000 under the 2001–03

rules; this may be compared with official performance in 2001–02—an "apples-to-apples comparison." HUD has also calculated what performance would have been in 2001–02 under the 1996–2000 rules; this may be compared with official performance in 2000—an "oranges-to-oranges comparison." These comparisons are presented in Table A.9.

²²¹ Prior to the October 2000 rule, purchases of these government-backed mortgages were only eligible for credit under the special affordable goal.

Table A.9

Effects of Counting Rule Changes on the GSEs' Performance on the Low- and Moderate-Income Goal

							Temporary	
			Technical		Bonus Points	Points	Adjustment	
GSE	Year	Baseline A*	Changes ¹	Baseline B*	Small MF ²	SF Rental ³	Factor (TAF) ⁴	Baseline C*
Fannie Mae	1999	45.9%	0.6%	46.8%	0.4%	1.2%	NA	48.4%
	2000	49.5%	1.8%	51.3%	0.3%	0.9%	NA	52.5%
	2001	47.7%	1.5%	49 2%	0.7%	1.6%	NA	51.5%
	2002	47.4%	1.6%	49.0%	1.2%	1.6%	NA	51.8%
	Change, 2001-02	-0.3%	0.1%	-0.2%	0.5%	0.0%	NA	0.3%
Freddie Mac	1999	46.1%	0.5%	46.6%	0.1%	1.3%	2.7%	50.7%
	2000	49.9%	0.7%	20.6%	0.2%	1.0%	3.3%	55.1%
	2001	47.2%	0.5%	47.7%	1.5%	1.4%	2.7%	53.2%
	2002	46.1%	0.4%	46.5%	1.0%	1.7%	2.2%	51.4%
	Change, 2001-02	-1.1%	-0.1%	-1.2%	-0.5%	0.3%	-0.5%	-1.8%

Details may not add to total due to rounding.

*Note: Baseline A represents performance under 1996-2000 scoring, thus figures for 1999-2000 in bold are official performance in those years. Baseline B adjusts Baseline A for technical changes in counting rules. Baseline C represents performance under 2001-03 scoring, thus figures for 2001-2002 in bold are official performance in those years.

³ Single-family rental bonus points: above a threshold, every qualifying unit in a 2-4 unit property in which one unit is owner-occupied and the other units

¹ Technical changes include credit for purchases of certain qualifying government-backed loans, exclusions of loans with missing information from the denominator in calculating performance, and the use of imputed or proxy rent for multifamily properties.

² Small multifamily bonus points: for 2001-03, every qualifying unit in a 5-50 unit multifamily property counts as two units in the numerator in calculating goal performance.

⁴ Temporary adjustment factor (TAF): in December 2000 Congress enacted a provision whereby every qualifying unit in a large (> 50 unit) multifamily are rental counts as two units in the numerator in calculating goal performance for 2001-03

property counts as 1.35 units in calculating goal performance for Freddie Mac for 2001-03. This provision does not apply to goal performance for Fannie Mae.

Specifically, Table A.9 shows performance under the low- and moderate-income goal in three ways. Baseline A represents performance under the counting rules in effect in 1996–2000. Baseline B incorporates the technical changes in counting rules changes in the treatment of missing data (including use of proxy rents), and eligibility for the goals of certain government-backed loans. Baseline C incorporates in addition to the technical changes the bonus points and, for Freddie Mac, the temporary adjustment factor. Baseline B corresponds to the counting approach proposed in this rule to take effect in 2005. Boldface figures under Baseline A for 1999-2000 and under Baseline C for 2001-02 indicate official goal performance, based on the counting rules in effect in those years—e.g., for Fannie Mae, 45.9 percent in 1999, 49.5 percent in 2000, 51.5 percent in 2001, and 51.8 percent in

- Performance on the Low- and Moderate-Income Goal under 1996-2000 Counting Rules Plus Technical Changes. If the "Baseline B" counting approach had been in effect in 2000-02 and the GSEs had purchased the same mortgages that they actually did purchase in those years, both Fannie Mae and Freddie Mac would have surpassed the low- and moderate-income goal in 2000 and fallen short in 2001 and 2002. Specifically, Fannie Mae's performance would have been 51.3 percent in 2000, 49.2 percent in 2001, and 49.0 percent in 2002. Freddie Mac's performance would have been 50.6 percent in 2000, 47.7 percent in 2001, and 46.5 percent in 2002.
- Performance on the Low- and Moderate-Income Goal under 2001-2003 Counting Rules. If the 2001-03 counting rules had been in effect in 2000-02 and the GSEs had purchased the same mortgages that they actually did purchase in those years (i.e., abstracting from any behavioral effects of "bonus points," for example), both GSEs would have substantially surpassed the lowand moderate-income goal in all three years, but both GSEs' performance figures would have deteriorated somewhat from 2000 to 2001, and, for Freddie Mac, from 2001 to 2002. Specifically, Fannie Mae's "Baseline C" performance would have been 52.5 percent in 2000, 51.5 percent in 2001, and 51.8 percent in 2002. Freddie Mac's performance would have been 55.1 percent in 2000, surpassing its official performance level of 53.2 percent in 2001 and 51.4 percent in 2002. Measured on this consistent basis, then, Fannie Mae's performance fell by 1.0 percentage point in 2001, and Freddie Mac's by 1.9 percentage points in 2001 and an additional 1.8 percentage points in 2002. These reductions were primarily due to 2001-02 being years of heavy refinance activity.

Details of Effects of Changes in Counting Rules on Goal Performance in 2001–02. As discussed above, counting rule changes that took effect in 2001 had significant positive impacts on the performance of both GSEs on the low- and moderate-income goal in that year—3.8 percentage points for Fannie Mae, and 6.0 percentage points for Freddie Mac. This section breaks down the effects of these changes on goal performance for both GSEs; results are shown in Table A.9.

- Freddie Mac. The largest impact of the counting rule changes on Freddie Mac's goal performance was due to the application of the temporary adjustment factor for purchases of mortgages on large multifamily properties, as enacted by Congress; this added 2.7 percentage points to goal performance in 2001, as shown in Table A.9. Bonus points for purchases of mortgages on small multifamily properties added 1.5 percentage points to performance, and bonus points for purchase of mortgages on owneroccupied 2-4 unit rental properties added 1.4 percentage points to performance. The remaining impact (0.5 percentage point) was due to technical changes in counting rules primarily, the exclusion of single-family units with missing information from the denominator in calculating goal performance. Credit for purchases of qualifying government-backed loans played a minor role in determining Freddie Mac's goal performance. These same patterns also appeared in 2002.
- Fannie Mae. The temporary adjustment factor applies to Freddie Mac's goal performance, but not to Fannie Mae's performance, thus counting rule changes had less impact on its performance than on Freddie Mac's performance in 2001. The largest impact of the counting rule changes on Fannie Mae's goal performance was due to the application of bonus points for purchases of mortgages on owner-occupied 2–4 unit rental properties, which added 1.6 percentage points to performance, and for purchases of mortgages on small multifamily properties, which added 0.7 percentage point to performance. The remaining impact (1.3 percentage points) was due to technical changes—primarily, the exclusion of singlefamily units with missing information from the denominator in calculating goal performance.²²² Credit for purchases of qualifying government-backed loans and the use of proxy rent for multifamily properties played a minor role in determining Fannie Mae's goal performance. These same patterns also appeared in 2002 for Fannie Mae.
- 4. Bonus Points for the Low- and Moderate-Income Goal

As discussed above, the Department established "bonus points" to encourage the GSEs to step up their activity in 2001–03 in two segments of the mortgage market—the small (5-50 unit) multifamily mortgage market, and the market for mortgages on 2-4 unit properties where 1 unit is owneroccupied and 1-3 units are occupied by renters. Bonus points did not apply to purchases of mortgages for owner-occupied 1-unit properties, for investor-owned 1-4 unit properties, and for large (more than 50 units) multifamily properties, although as also discussed above, a "temporary adjustment factor" applied to Freddie Mac's purchases of qualifying mortgages on large multifamily properties.

Bonus points for small multifamily properties. Each unit financed in a small multifamily property that qualified for any of the housing goals was counted as two units in the numerator (and one unit in the denominator) in calculating goal performance for that goal. For example, if a GSE financed a mortgage on a 40-unit property in which 10 of the units qualified for the low- and moderate-income goal, 20 units would be entered in the numerator and 40 units in the denominator for this property in calculating goal performance.

Small multifamily bonus points thus encouraged the GSEs to play a larger role in this market, and also to purchase mortgages on such properties in which large shares of the units qualified for the housing goals. Some evidence may be gleaned from the data provided to HUD by the GSEs for 2001–02.

Fannie Mae financed 37,403 units in small multifamily properties in 2001 that were eligible for the low- and moderate-income goal, and 58,277 such units in 2002, a twoyear increase of more than 700 percent from the 7,196 such units financed in 2000. Small multifamily properties also accounted for a greater share of Fannie Mae's multifamily business in 2001–02—7.4 percent of total multifamily units financed in 2001 and 13.2 percent in 2002, up from 2.5 percent in 2000. However, HUD's 2000 rule reported information from the 1991 Residential Finance Survey that small multifamily properties accounted for 37 percent of all multifamily units, thus Fannie Mae was still less active in this market than in the market for large multifamily properties.²²³

Within the small multifamily market, there was no evidence that Fannie Mae targeted affordable properties to a greater extent in 2001–02 than in 2000. That is, 87 percent of Fannie Mae's small multifamily units qualified for the low- and moderate-income goal in 2000; this fell to 75 percent in 2001, but rose to 89 percent in 2002.

Freddie Mac financed 50,299 units in small multifamily properties in 2001 that were eligible for the low- and moderate-income goal and 42,772 such units in 2002, a two-year increase of more than 1300 percent from the 2,996 units financed in 2000. Small multifamily properties also accounted for a significantly greater share of Freddie Mac's multifamily business in 2001—16.1 percent of total multifamily units financed in 2001 and 13.4 percent in 2002, up from 1.8 percent in 2000.

Within the small multifamily market, there was some evidence that Freddie Mac targeted affordable properties to a greater extent in 2001–02 than in 2000. That is, 87 percent of Freddie Mac's small multifamily units qualified for the low- and moderate-income goal in 2000; this rose to 96 percent in 2001 and 94 percent in 2002.

In summary, then, there is evidence that bonus points for small multifamily properties had an impact on Fannie Mae's role in this market in 2001–02 and an even larger impact on Freddie Mac's role in this market. In addition, Fannie Mae has announced a program to increase its role in this market further in future years.²²⁴

²²² Exclusion of loans with missing information had a greater impact on Fannie Mae's goal performance than on Freddie Mac's goal performance.

 $^{^{223}}$ **Federal Register**, October 31, 2000, Footnote 145, p. 65141.

²²⁴ ''Fannie Courting Multifamily Sellers; Small Banks Balking,'' *American Banker*, January 13, 2003, p. 1.

Bonus points for single-family rental properties. Above a threshold, each unit financed in a 2-4 unit property with at least one owner-occupied unit (referred to as "OO24s" below) that qualified for any of the housing goals was counted as two units in the numerator (and one unit in the denominator) in calculating goal performance for that goal in 2001-03. The threshold was equal to 60 percent of the average number of such qualifying units over the previous five years. For example, Fannie Mae financed an average of 50,030 low- and moderate-income units in these types of properties between 1996 and 2000, and 101,423 such units in 2001. Thus Fannie Mae received 71,405 bonus points in this area in 2001—that is, 101,423 minus 60 percent of 50,030. So 172,828 units were entered in the numerator for these properties in calculating low- and moderate-income goal performance.

Single-family rental bonus points thus encouraged the GSEs to play a larger role in this market, and also to purchase mortgages on such properties in which large shares of the units qualified for the housing goals. As for small multifamily bonus points, again some evidence may be gleaned from the data provided to HUD by the GSEs for 2001–02.

Fannie Mae financed 175,103 units in OO24s in 2001 that were eligible for the lowand moderate-income goal and 229,632 such units in 2002, a two-year increase of nearly 200 percent from the 77,930 units financed in 2000. However, Fannie Mae's total singlefamily business increased at approximately the same rate as its OO24 business in 2001 and 2002, thus the share of its business accounted for by OO24s was the same in 2001–02 as in 2000—4 percent.

Within the OO24 market, there was no evidence that Fannie Mae targeted affordable properties to a greater extent in 2001–02 than in 2000. That is, approximately 55–60 percent of Fannie Mae's OO24 units qualified for the low- and moderate-income goal in each of these three years.

Freddie Mac financed 96,050 units in OO24s in 2001 that were eligible for the lowand moderate-income goal and 146,222 such units in 2002, also a two-year increase of nearly 200 percent from the 49,993 units financed in 2000. However, Freddie Mac's total single-family business increased at approximately the same rate as its OO24 business in 2001–02, thus the share of its business accounted for by OO24s was the same in 2002 as in 2000—4 percent.

As for Fannie Mae, within the OO24 market there was no evidence that Freddie Mac targeted affordable properties to a greater extent in 2001–02 than in 2000. That is, 68–69 percent of Fannie Mae's OO24 units qualified for the low- and moderate-income goal in each year from 2000 through 2002.

5. Effects of 2000 Census on Scoring of Loans Toward the Low- and Moderate-Income Housing Goal

Background. Scoring of housing units under the Low- and Moderate-Income Housing Goal is based on data for mortgagors' incomes for owner-occupied units, rents for rental units, and area median incomes, as follows:

For single-family owner-occupied units:

- The mortgagors' income at the time of mortgage origination.
- The median income of an area specified as follows: (i) For properties located in Metropolitan Statistical Areas (MSAs), the area is the MSA; and (ii) for properties located outside of MSAs, the area is the county or the non-metropolitan portion of the State in which the property is located, whichever has the larger median income, as of the year of mortgage origination (which may be for the current year or a prior year).

For rental units in single-family properties with rent data are available (assuming no income data available for actual or prospective tenants):

- The unit rent (or average rent for units of the same type) at the time of mortgage origination.
- The area median income as specified for single-family owner-occupied units.

For rental units in multifamily properties where rent data are available.

- The unit rent (or the average rent for units of the same type) at the time of mortgage acquisition by the GSE.
- The area median income as specified for single-family owner-occupied units, but as of the year the GSE acquired the mortgage.

For rental units in multifamily properties where rent data are not available, the GSE may apply HUD-estimated rents which are based on the following area data;

- The median rent in the census tract where the property is located, as of the most recent decennial census.
- The area median income as specified for single-family owner-occupied units, but as of the most recent decennial census.

Thus, scoring loans under the Low- and Moderate-Income Goal requires a data series showing annual median incomes for MSAs, non-metropolitan counties, and the non-metropolitan portions of states; and decennial census data on median incomes for census tracts.²²⁵

For scoring loans purchased by the GSEs year-by-year from 1993 through 2002, area median income estimates produced by HUD's Economic and Market Analysis Division were used. An example will illustrate the estimation procedure. To generate the area median income estimates that were used to score GSE loans in 2002, data from the 1990 census on 1989 area median incomes were adjusted to 2002 using Bureau of Labor Statistics survey data on rates of change in average incomes for MSAs and counties between 1989 and 1999, data from the Census Bureau's Current Population Survey on rates of change in median family incomes for the nine Census Divisions between 1989 and 2000, and an assumed 4.0 percent per year inflation factor between 2000 and 2002.226, 227

2005 Procedure. Relative to the above procedure, scoring of loans purchased by the GSEs in and after 2005 will be affected by two factors. First, the Economic and Market Analysis Division has begun to incorporate data from the 2000 census into its procedure for estimating annual area median incomes and American Community Survey data are becoming available at increasingly finer levels of geographical detail for use in annual updating. Beginning in 2005 Bureau of Labor Statistics data on rates of inflation in average wages will not be used. For 2005, the procedure for estimating area median incomes will be to adjust 2000 census data on 1999 area median incomes to 2003 using data from the Census Bureau's American Community Survey (ACS) on rates of change in average incomes for States between 1999 and 2003, with a further adjustment to 2005 based on an appropriate annual inflation factor.²²⁸ Increasingly more detailed ACS data will be available and will be used in subsequent years, as ACS estimates for metropolitan and micropolitan areas and counties become available.

The second factor is the Office of Management and Budget's June, 2003, respecification of MSA boundaries based on analysis of 2000 census data.²²⁹

Analysis. For purposes of specifying the level of the Low- and Moderate-Income Housing Goal, HUD developed a methodology for scoring loans purchased by the GSEs in past years through 2002 as though the re-benchmarking of area median income estimates to the 2000 census and the 2003 re-designation of MSAs had been in effect and HUD had been using an ACS-based estimation procedure at the time the estimates for these years were prepared. For this purpose, HUD created a series of annual estimates of median incomes for MSAs, nonmetropolitan counties, and the nonmetropolitan portions of states. For 2000, the estimates were 1999 census medians trended by three-fourths of the 4.0 percent annual

FY [year] Median Family Incomes" for years 1993 through 2002, issued by the Economic and Market Analysis Division, Office of Economic Affairs, PD&R, U.S. Department of Housing and Urban Development.

²²⁷The procedure applicable to the decennial census data used to generate estimated rents is explained in connection with data used to define Underserved Areas in Appendix B.

²²⁸ Transition from the 2002 methodology to the 2005 methodology is occurring in stages in 2003 and 2004. To generate the area median income estimates used to score GSE loans in 2003, data from the 2000 census on 1999 area median incomes were adjusted to 2001 using Bureau of Labor Statistics survey data on rates of change in average incomes for MSAs and counties between 1999 and 2000, data on rates of change in median incomes for the United States and individual States between 1999 and 2001 from Census Bureau's Current Population Survey and American Communities Survey, and an assumed 3.5 percent per year inflation factor between 2001 and 2003. (See "HUD Methodology for Estimating FY 2003 Median Family Incomes," issued by the Economic and Market Analysis Division, op cit.) A similar procedure has been used to generate area median income estimates for scoring GSE loans in 2004.

²²⁹ HUD has deferred application of the 2003 MSA specification to 2005, pending completion of the present rulemaking process.

²²⁵ In New England, MSAs were defined through mid-2003 in terms of Towns rather than Counties, and the portion of a New England county outside of any MSA was regarded as equivalent to a county in establishing the metropolitan or nonmetropolitan location of a property. The MSA definitions established by the Office of Management and Budget (OMB) in June, 2003 defined MSAs in New England in terms of counties.

²²⁶The procedure is explained in detail in annual releases entitled "HUD Methodology for Estimating

trending factor (to adjust the figures from mid-1999 to April 1, 2000). For 2001, the estimates were based on one-and-three-fourths years of trending, since no data would have been available to use for updating. The 2002 estimates would have used one year of data and 1.75 years of trending. The 2003 estimates would have used two years of data plus 1.75 years of trending. Area median incomes from 1989 to 1999 were estimated based on trend-lines

between 1989 and 1999 census data. The 2003 OMB MSA designations were applied.

The resulting estimates of area median incomes for MSAs, non-metropolitan counties, and the non-metropolitan parts of States, were used to re-score loans purchased by the GSEs between 1999 and 2002, and were used further in estimating the share of loans originated in metropolitan areas that would be eligible to score toward the Lowand Moderate-Income Housing Goal, from HMDA data. The results of the retrospective

GSE analysis are provided in Table A.10. The results of the GSE-HMDA comparative analysis are presented in the next section.

Table A.10 shows three sets of estimates for each GSE, based respectively on the counting rules in place in 2001–2002 (but disregarding the bonus points and Temporary Adjustment Factor), on the addition of 2000 census re-benchmarking, and finally on the addition of both 2000 census rebenchmarking and 2003 MSA specification.

Table A.10

Effects of 2000 Census on Scoring Toward Low- and Moderate-Income Goal

2002	49.0%	47.9%	46.5% 46.2% 45.0%
2001	49.2% 49.2%	48.7%	47.7% 47.7% 47.0%
2000	51.3% 51.3%	51.2%	50.6% 50.6% 50.2%
1999	46.8%	46.3%	46.6% 46.6% 46.0%
Fannie Mae:	Benchmark With 2000 Re-benchmarking	Adding 2003 MSAs	Freddie Mac: Benchmark With 2000 Re-benchmarking Adding 2003 MSAs

6. GSEs Compared With the Primary Conventional Conforming Mortgage Market

This section and the next five sections (Sections E.7 to E.12) provide a detailed analysis of the extent to which the GSEs' loan purchases mirror or depart from the patterns found in the primary mortgage market. As in Section C.5, the GSEs' affordable lending performance is also compared with the performance of depository lenders such as commercial banks and thrift institutions. Dimensions of lending considered include the three "goals-qualifying" categoriesspecial affordable borrowers, less-thanmedian income borrowers, and underserved areas. The special affordable category consists mainly of very-low-income borrowers, or borrowers who have an annual income less than 60 percent of area median income. Because this category is more targeted than the broadly-defined less-thanmedian-income (or low-mod) category, the discussion below will often focus on the special affordable category as well as the underserved areas category which adds a neighborhood dimension (low-income and high-minority census tracts) to the analysis. This section will also compare the performance of Fannie Mae and Freddie Mac in funding first-time homebuyers with that of primary lenders in the conventional conforming market.

The remainder of this introductory section E.6 provides a list of the major and specific findings which are presented in detail in the following Sections E.7 through 12. Sections 7 and 8 define the primary mortgage market and discuss some technical issues related to the use of the GSE and HMDA data. Sections 8 and 9 compare the GSEs' performance with market performance for home purchase and first-time homebuyer loans, while Section 10 does the same for total single family loans (that is, refinance loans and home purchase loans). Section 11 examines GSE purchases in individual metropolitan areas. Following these analyses. Section 12 examines the overall market share of the GSEs in important submarkets such as first-time homebuyers.

a. Main Findings on GSEs' Performance in the Single-Family Market

There are six main findings from this analysis concerning the GSEs' purchases of single-family-owner mortgages:

1. While Freddie Mac has improved its affordable lending performance in recent years, it has consistently lagged the conventional conforming market in funding affordable home purchase loans for special affordable and low-moderate-income borrowers and underserved neighborhoods targeted by the housing goals.²³⁰ However, Freddie Mac's recent performance (2001 and 2002) has been much closer to the market than its earlier performance.

2. In general, Fannie Mae's affordable lending performance has been better than

Freddie Mac's. But like Freddie Mac, Fannie Mae's average performance during past periods (e.g., 1993-2002, 1996-2002, 1999-2002) has been below market levels. However, it is encouraging that Fannie Mae markedly improved its affordable lending performance relative to the market during 2001 and 2002, the first two years of HUD's higher housing goal levels. Fannie Mae's average performance during 2001 and 2002 approached the market on the special affordable and underserved areas categories and matched the market on the low-mod category. Under one measure of GSE and market activity, Fannie Mae matched the market during 2002 on the special affordable category and slightly outperformed the market on the low-mod and underserved areas categories. In this case, which is referred to in the text as the "purchase year" approach, Fannie Mae's performance is based on comparing its purchases of all loans (both seasoned loans and newly-originated mortgages) during a particular year with loans originated in the market in that year. When Fannie Mae's performance is measured on an "origination year" basis (that is, allocating Fannie Mae's purchases in a particular year to the year that the purchasedloan was originated), Fannie Mae matched the market in the low- and moderate-income category during 2002, and lagged the market slightly on the other two categories.

3. Both Fannie Mae and Freddie lag the conventional conforming market in funding first-time homebuyers, and by a rather wide margin. Between 1999 and 2001, first-time homebuyers accounted for 27 percent of each GSE's purchases of home loans, compared with 38 percent for home loans originated in the conventional conforming market.

4. The GSEs have accounted for a significant share of the total (government as well as conventional) market for home purchase loans, but their market share for each of the affordable lending categories (e.g., low-income borrowers and census tracts, high-minority census tracts) has been less than their share of the overall market.

5. The GSEs also account for a very small share of the market for important groups such as minority first-time homebuyers Considering the total mortgage market (both government and conventional loans), it is estimated that the GSEs purchased only 14 percent of loans originated between 1999 and 2001 for African-American and Hispanic first-time homebuyers, or one-third of their share (42 percent) of all home purchase loans originated during that period. Considering the conventional conforming market and the same time period, it is estimated that the GSEs purchased only 31 percent of loans originated for African-American and Hispanic first-time homebuyers, or about one-half of their share (57 percent) of all home purchase loans in that market.

6. The GSEs' small share of the first-time homebuyer market could be due to the preponderance of high (over 20 percent) downpayment loans in their mortgage purchases.

b. Specific Findings on GSE Performance in the Single-Family Market

This section presents 17 specific findings from the analyses reported in Sections E.7

- through 12; they are grouped under the following five topic-headings:
 - (b.1) Longer-term Performance of the GSEs;
- (b.2) Performance of the GSEs During Recent Years;
- (b.3) The GSEs' Funding First-time Homebuyer Loans;
- (b.4) Performance of the GSEs Based on Total (Home Purchase and Refinance) Loans; (b.5) GSE Market Shares; and,
 - (b.6) Additional Findings.
- (b.1) Longer-Term Performance of the GSEs

The longer-run performance of the GSEs is examined between 1993 and 2002 (which covers the period since the housing goals were put into effect) and between 1996 and 2002 (which covers the period under the current definitions of the housing goals). Of the two borrower-income goals, the analysis below will typically focus on the special affordable category, which is a more targeted category than the rather broadly defined lowand moderate-income category.

- (1) Since the early nineties, the mortgage industry has introduced new affordable lending programs and has allowed greater flexibility in underwriting lower-income loans. There is evidence that these programs are paying off in terms of more mortgages for low-income and minority borrowers. As noted earlier, Fannie Mae and Freddie Mac have played an active role in this upsurge of affordable lending, as indicated by the high growth rates of their goals-qualifying business.
- Between 1993 and 2002, the GSEs' purchases of home loans in metropolitan areas increased by 57 percent.²³¹ Their purchases of home loans for the three housing goals increased at much higher rates—264 percent for special affordable loans, 142 percent for low- and moderate-income loans, and 112 percent for loans in underserved census tracts.
- (2) Both Fannie Mae and Freddie Mac have improved their purchases of affordable loans since the housing goals were put in place, as indicated by the increasing share of their business going to the three goals-qualifying categories. (See Table A.15 in Section E.9.)
- Between 1992 and 2002, the special affordable share of Fannie Mae's business more than doubled, rising from 6.3 percent to 16.3 percent, while the underserved areas share increased more modestly, from 18.3 percent to 26.7 percent. The figures for Freddie Mac are similar. The special affordable share of Freddie Mac's business rose from 6.5 percent to 15.8 percent, while the underserved areas share also increased but more modestly, from 18.6 percent to 25.8 percent.
- (3) While both GSEs improved their performance, they have lagged the primary

²³⁰ The "affordable lending performance" of Fannie Mae and Freddie Mac refers to the performance of the GSEs in funding loans for lowincome and underserved borrowers through their purchase (or guarantee) of loans originated by primary lenders. It does not, of course, imply that the GSEs themselves are lenders originating loans in the primary market.

²³¹ Throughout this analysis, the terms "home loan" and "home mortgage" will refer to a "home purchase loan." as opposed to a "refinance loan." As noted earlier, the mortgage data reported in this paper are for metropolitan areas, unless stated otherwise. Restricting the GSE data to metropolitan areas is necessary to make it comparable with the HMDA-reported conventional primary market data, which is more reliable for metropolitan areas. The analysis of first-time homebuyers in Sections E.9 and E.12 cover both metropolitan and non-metropolitan areas.

market in providing affordable loans to low-income borrowers and underserved neighborhoods. Freddie Mac's average performance, in particular, fell far short of market performance during the 1990s. Fannie Mae's average performance was better than Freddie Mac's during the 1993–2002 period as well as during the 1996–2002 period, which covers the period under HUD's currently-defined housing goals.

- Between 1993 and 2002, 11.8 percent of Freddie Mac's mortgage purchases were for special affordable borrowers, compared with 12.7 percent of Fannie Mae's purchases, 15.4 percent of loans originated by depositories, and 15.4 percent of loans originated in the conventional conforming market (without estimated B&C loans).²³²
- Considering the underserved areas category for the 1996–2002 period, 21.7 percent of Freddie Mac's purchases financed properties in underserved neighborhoods, compared with 23.5 percent of Fannie Mae's purchases, 24.9 percent of loans originated by depositories, and 25.4 percent of loans originated in the conventional conforming market.
- (b.2) Performance of the GSEs During Recent Years

The recent performance of the GSEs is examined for the four-year period between 1999 and 2002 and then for 2001 and 2002, which were the first two years that the GSEs operated under the higher goal targets established by HUD in the 2000 Rule. As explained below, the most interesting recent trend concerned Fannie Mae, which improved its performance during 2001 and 2002, at a time when the conventional conforming market was showing little change in affordable lending.

- (4) During the recent 1999-to-2002 period, both Fannie Mae and Freddie Mac fell significantly below the market in funding affordable loans.
- Between 1999 and 2002, special affordable loans accounted for 14.4 percent of Fannie Mae's purchases, 14.5 percent of Freddie Mac's purchases, and 16.4 percent of loans originated in the market; thus, the "Fannie-Mae-to-market" ratio was 0.88 and the "Freddie-Mac-to-market" ratio was also 0.88.
- During the same period, underserved area loans accounted for 24.0 percent of Fannie Mae's purchases, 22.9 percent of Freddie Mac's purchases, and 25.8 percent of loans originated in the market; the "Fannie-Mae-to-market" ratio was 0.93 and the "Freddie-Mac-to-market" ratio was only 0.89.²³³

- (5) After experiencing declines from 1997 to 1999, Fannie Mae's affordable lending performance improved between 2000 and 2002.
- After declining from 23.0 percent in 1997 to 20.4 percent in 1999, the share of Fannie Mae's purchases financing properties in underserved areas jumped by three percentage points to 23.4 percent in 2000, and then increased further to 26.7 percent by 2002.
- After declining from 13.2 percent in 1998 to 12.5 percent in 1999, the share of Fannie Mae's purchases going to special affordable loans rebounded to 13.3 percent in 2000, 14.9 percent in 2001, and 16.3 percent in 2002.
- (6) Freddie Mac's performance on the two borrower-income categories improved between 2000 and 2002, but not as much as Fannie Mae's performance. Freddie Mac's performance on the underserved areas category increased substantially between 2001 and 2002.
- The share of Freddie Mac's single-family-owner business going to special affordable home loans increased from 9.2 in 1997 to 14.7 percent in 2000 before falling to 14.4 percent in 2001 and rising to 15.8 percent in 2001.
- Freddie Mac's purchases of underserved area loans increased at a modest rate from 19.8 percent in 1997 to 22.3 percent in 2001, before sharply jumping to 25.8 percent in 2002
- (7) The long-standing pattern of Fannie Mae outperforming Freddie Mac was reversed during 1999 and 2000. But that pattern returned in 2001 and 2002 when Fannie Mae outperformed Freddie Mac on all three goals-qualifying categories.
- Fannie Mae and Freddie Mac had practically the same performance in 1992 on the three housing goal categories—special affordable loans accounted for 6.3 percent of Fannie Mae's purchases and 6.5 percent of Freddie Mac's purchases, for a "Fannie-Maeto-Freddie-Mac" ratio of 0.97. The 1992 ratio for underserved areas was also 0.98 and that for low-mod, 1.02. Reflecting Fannie Mae's much better performance, the special affordable "Fannie-Mae-to-Freddie-Mac" ratio had risen to 1.27 by 1997, the underserved area ratio to 1.17, and the low-mod ratio to 1.10.
- However, in 1999, the "Fannie-Mae-to-Freddie-Mac" ratio for each of the three goals-qualifying categories fell to slightly below one. 1999 was the first year since 1992 that Freddie Mac had outperformed Fannie Mae in purchasing affordable home loans (although only by a very slight margin).
- In 2000, Freddie Mac's sharper increases in special affordable and low-mod purchases further reduced the "Fannie-Mae-to-Freddie-Mac" ratios for these two categories to 0.90 and 0.96, respectively. Fannie Mae's sharper increase in underserved areas funding resulted in the "Fannie-Mae-to-Freddie-Mac" ratio rising from slightly below one (0.98) in 1999 to 1.06 in 2000.
- Fannie Mae's stronger performance during 2001 and 2002 returned the "Fannie-

performance is closer to the market, it continues to fall below market levels during the 2000–2002 period.

- Mae-to-Freddie-Mac" ratios for special affordable and low-mod loans to above one (1.03 for both), indicating better performance for Fannie Mae. The "Fannie-Mae-to-Freddie-Mac" ratio (1.03) for the underserved area category remained above one in 2002.
- (8) While Freddie Mac has consistently improved its performance relative to the market, it continued to lag the market in funding affordable home loans in 2001 and 2002.
- Unlike Fannie Mae, Freddie Mac had not made any progress through 1997 in closing its gap with the market. The "Freddie Macto-market" ratio for the special affordable category actually declined from 0.63 in 1992 to 0.59 in 1997. But Freddie Mac's sharp improvement in special affordable purchases resulted in the "Freddie-Mac-to-market" ratio rising to 0.88 by 2000. After declining from 0.84 in 1992 to 0.80 in 1997, the "Freddie-Mac-to-market" ratio for underserved areas had risen only modestly to 0.84 by the year 2000. Thus, Freddie Mac's improvements prior to 2001 allowed it to close its gap with the market, mainly for the special affordable category where its gap had been the widest.
- During 2001 and 2002, Freddie Mac continued to close its gap with the market. By 2002, all three "Freddie-Mac-to-market" ratios were higher than in 2000, although they continued to fall below one: special affordable (0.97), low-mod (0.97), and underserved areas (0.98). Thus, during 2002, Freddie Mac lagged the market on all three goals-qualifying categories.
- (9) Through 1998, Fannie Mae had significantly improved its performance relative to the market. But as a result of shifts in its purchases of affordable loans, Fannie Mae lagged the market even further in 2000 than it had in some earlier years. During 2001 and 2002, Fannie Mae again improved its performance relative to the market.
- · The above analysis and the data reported under this specific finding (9) are based on the "purchase year" approach for measuring GSE activity. The purchase year approach assigns GSE purchases of both prior-year (seasoned) and newly-originated mortgages to the calendar year in which they were purchased by the GSE; this results in an inconsistency with the HMDA-reported market data, which covers only newly originated mortgages. Sections E.9 and E.10 also report the results of an alternative "origination year" approach that assigns GSE purchases to their year of origination, placing them on a more consistent basis with the HMDA-reported market data. The findings from the origination-year approach are discussed under specific finding (10).
- Fannie Mae's decline in performance during 1999 resulted in the "Fannie-Mae-to-market" ratio falling sharply to 0.74 for special affordable and to 0.81 for underserved areas. In 2000, Fannie Mae improved and reversed its declining trend, as the "Fannie-Mae-to-market" ratios increased to 0.79 for special affordable purchases and to 0.89 for underserved area purchases.
- During 2001, Fannie Mae increased its special affordable percentage by 1.6 percentage points to 14.9 percent, which was only 0.7 percentage point below the market's performance of 15.6 percent. Fannie Mae

²³² Unless otherwise noted, the conventional conforming market data reported in this section exclude an estimate of B&C loans; the less-risky Aminus portion of the subprime market is included in the market definition. See Section E.7 and Appendix D for a discussion of primary market definitions and the uncertainty surrounding estimates of the number of B&C loans in HMDA data. As noted there, B&C loans are much more likely to be refinance loans rather than home purchase loans.

²³³ Fannie Mae had a particularly poor year during 1999. Therefore, the text also reports averages for 2000–2002, dropping the year 1999 (see Table A.13 in Section E.9). While Fannie Mae's

increased its low-mod percentage from 40.8 percent to 42.9 percent at the same time that the low-mod share of the primary market was falling from 44.4 percent to 42.9 percent, placing Fannie Mae at the market's performance. Similarly, Fannie Mae increased its underserved area percentage from 23.4 percent in 2000 to 24.4 percent in 2001 while the underserved area share of the primary market was falling from 26.4 percent to 25.2 percent, placing Fannie Mae at 0.8 percentage point from the market's performance.

- During 2002, Fannie Mae continued to improve its performance on all three goals categories. Using the purchase-year approach to measure GSE performance, Fannie Mae matched the market on the special affordable category (16.3 percent for both), led the market on the low-mod category (45.3 percent for Fannie Mae compared with 45.2 percent for the market), and led the market on the underserved area category (26.7 percent for Fannie Mae versus 26.4 percent for the market). As explained in the next specific finding, measuring Fannie Mae's performance on the more consistent origination-year basis gives somewhat different results.
- (10) This analysis addresses several technical issues involved in measuring GSE performance. The above analysis was based on the "purchase year" approach, as defined in (9) above. An alternative "origination year" approach has also been utilized, which assigns GSE purchases to their year of origination, placing them on a more consistent basis with the HMDA-reported market data. While the average results (e.g., 1999–2002 GSE performance) are similar under the two reporting approaches, GSE performance in any particular year can be affected, depending on the extent to which the GSE has purchased goals-qualifying seasoned loans in that particular year.
- The choice of which approach to follow particularly affected conclusions about Fannie Mae's performance relative to the market. Under the origination-year approach, Fannie Mae lagged the market on all three housing goal categories during 2001 and on the special affordable and underserved area categories during 2002. In 2002, Fannie Mae essentially matched the market on the low-mod category (45.4 percent for Fannie Mae compared with 45.2 percent of the market).
- (b.3) The GSEs' Funding of First-Time Homebuyer Loans
- (11) The GSEs' funding of first-time homebuyers has been compared to that of primary lenders in the conventional conforming market. Both Fannie Mae and Freddie lag the market in funding first-Time homebuyers, and by a rather wide margin.
- First-time homebuyers account for 27 percent of each GSE's purchases of home loans, compared with 38 percent for home loans originated in the conventional conforming market.
- (b.4) Performance of the GSEs Based on Total (Home Purchase and Refinance) Loans
- (12) The GSEs' acquisitions of total loans (including refinance loans as well as home purchase loans) were also examined. The main results indicate that while the GSEs

- have improved their performance they have consistently lagged the market in funding loans (home purchase and refinance) that qualify for the housing goals. (See Table A.20 of Section E.10, which is based on the purchase-year approach for measuring GSE activity.)
- 1999–2002. During the recent 1999-to-2002 period, both Fannie Mae and Freddie Mac fell significantly below the market in funding affordable loans. Between 1999 and 2002, special affordable loans accounted for 13.8 percent of Fannie Mae's purchases, 13.8 percent of Freddie Mac's purchases, and 15.7 percent of loans originated in the market; thus, the "Fannie-Mae-to-market" ratio and the "Freddie-Mac-to-market" ratio were each 0.88 during this period.
- During the same period, underserved area loans accounted for 23.8 percent of Fannie Mae's purchases, 23.1 percent of Freddie Mac's purchases, and 25.7 percent of loans originated in the market; thus, the "Fannie-Mae-to-market" ratio was 0.93 and the "Freddie-Mac-to-market" ratio was 0.90.²³⁴
- 2002. During this year of heavy refinancing, Fannie Mae's performance approached but fell below market performance. The "Fannie-Mae-to-market" ratios were 0.98 for special affordable loans, 0.99 for low-mod loans, and 0.99 for underserved area loans. The "Freddie-Macto-market" ratios were 0.04–0.05 lower: 0.93 for special affordable loans, 0.94 for low-mod loans, and 0.94 for underserved area loans.

(b.5) GSE Market Shares

This analysis includes an expanded "market share" analysis that documents the GSEs' contribution to important segments of the home purchase and first-time homebuyer markets.

- (13) The GSEs account for a significant share of the total (government as well as conventional conforming) market for home purchase loans. However, the GSEs' market share for each of the affordable lending categories is much less than their share of the overall market.
- The GSEs' purchases were estimated to be 46 percent of all home loans originated in metropolitan areas between 1999 and 2002 but only 29 percent of loans originated for African-American and Hispanic borrowers, 37 percent of loans originated for low-income borrowers, and 36 percent for properties in underserved areas. The GSEs' market share for the various affordable lending categories increased during 2001 and 2002, but the above-mentioned pattern remained.
- A study by staff from the Federal Reserve Board suggests that the GSEs have a much more limited role in the affordable lending market than is suggested by the data presented above.²³⁵ The Fed study, which

- combined market share, downpayment, and default data, concluded that the GSEs play a very minimal role in providing credit support and assuming credit risk for low-income and minority borrowers; for example, the study concluded that in 1995 the GSEs provided only four percent of the credit support going to African-Americans and Hispanic borrowers.
- Section V of this study begins to reconcile these different results by examining the role of the GSEs in the first-time homebuyer market and the downpayment characteristics of mortgages purchased by the GSEs.
- (14) The market role of the GSEs appears to be particularly low in important market segments such as minority first-time homebuyers.
- Recent analysis has estimated that the GSEs' share of the market for first-time African-American and Hispanic homebuyers was only 14.3 percent between 1999 and 2001, or about one-third of their share (41.5 percent) of all home purchases during that period. This analysis includes the total market, including government and conventional loans.
- A similar market share analysis was conducted for the conventional conforming market. Between 1999 and 2001, the GSEs' purchases accounted for 56.6 percent of all home loans originated in the conventional conforming market of both metropolitan areas and non-metropolitan areas. Their purchases of first-time homebuyer loans, on the other hand, accounted for only 39.8 percent of all first-time homebuyer loans originated in that market.
- The GSEs have funded an even lower share of the minority first-time homebuyer market in the conventional conforming market. Between 1999 and 2001, the GSEs purchases of African-American and Hispanic first-time homebuyer loans represented 30.9 percent of the conventional conforming market for these loans. Thus, while the GSEs have accounted for 56.6 percent of all home loans in the conventional conforming market, they have accounted for only 30.9 percent of loans originated in that market for African-American and Hispanic first-time homebuyers.
- (15) A noticeable pattern among the lower-income-borrower loans purchased by the GSEs is the predominance of loans with high downpayments. This pattern of purchasing mainly high downpayment loans is one factor explaining why the Fed study found such a small market role for the GSEs. It may be the explanation for the small role of Fannie Mae and Freddie Mac in the first-time homebuyer market. Further study of this issue is needed.
- During 2001 and 2002, approximately 50 percent of Fannie Mae's special affordable, low-mod, and underserved areas loans had downpayments of at least 20 percent, a percentage only slightly smaller than the corresponding percentage (53 percent) for all Fannie Mae's home loan purchases. Similar patterns of high downpayments on the goalsqualifying loans were evident in Freddie

²³⁴ As explained in Section E.9, deducting B&C loans from the market totals has more impact on the market percentages for total (both home purchase and refinance) loans than for only home purchase loans. The effects of excluding B&C loans from the total market can be seen by comparing the third and sixth columns of data in Table A.19 in Section E.10.

²³⁵ See Glenn B. Canner, Wayne Passmore, and Brian J. Surette, "Distribution of Credit Risk Among Providers of Mortgages to Lower-Income and

Minority Homebuyers" in Federal Reserve Bulletin, 82(12): 1077–1102, December, 1996.

Mac's 2001 and 2002 purchases, as well as in prior years for both GSEs.

(b.6) Additional Findings

This analysis examines two additional topics related to minority first-time homebuyers and the use of HMDA data for measuring the characteristics of loans originated in the conventional conforming market.

(16) The share of the GSEs' purchases for minority first-time homebuyers was much less than the share of newly-originated mortgages in the conventional conforming market for those homebuyers.

• Between 1999 and 2001, minority firsttime homebuyers accounted for 6.6 percent of Fannie Mae's purchases of home loans, 5.8 percent of Freddie Mae's purchases, and 10.6 percent of home loans originated in the conventional conforming market. For this subgroup, Fannie Mae's performance is 62 percent of market performance, while Freddie Mae's performance is 55 percent of market performance.

(17) Some studies have concluded that HMDA data overstate the share of market loans going to low-income borrowers and underserved areas. This analysis does not support that conclusion.

• This analysis compares the low-income and underserved areas characteristics of the GSEs' purchases of newly-originated ("current-year") loans as reported both by the GSEs" own data and by HMDA data.236 For recent years, HMDA data on loans sold to the GSEs do not always have higher percentages of low-income and underserved areas loans than the GSEs' own data on their purchases of newly-originated mortgages. For example, from 1996-2002, both HMDA and Fannie Mae reported that special affordable loans accounted for about 13 percent of Fannie Mae's purchases of newly-originated loans. HMDA reported a 21.9 underserved areas percentage for Fannie Mae, which was rather similar to the underserved areas percentage (22.4 percent) reported by Fannie Mae itself. Given that similar patterns were observed for Freddie Mac's mortgage purchases, it appears that there is no upward bias in the HMDAbased market benchmarks used in this study.

7. Definition of Primary Market

Conventional Conforming Market. The market analysis section is based mainly on HMDA data for mortgages originated in the conventional conforming market of metropolitan areas during the years 1992 to 2002. Only conventional loans with a principal balance less than or equal to the conforming loan limit are included; the conforming loan limit was \$300,700 in

2002—these are called "conventional conforming loans." The GSEs" purchases of FHA-insured, VA-guaranteed, and Rural Housing Service loans are excluded from this analysis. The conventional conforming market is used as the benchmark against which to evaluate the GSEs because that is the market definition Congress requires that HUD consider when setting the affordable housing goals. However, as discussed in Section II, some have questioned whether lenders in the conventional market are doing an adequate job meeting the credit needs of minority borrowers, which suggests that this market provides a low benchmark.²³⁷

Manufactured Housing Loans. In their comments on the proposed 2000 Rule, both GSEs raised questions about whether loans on manufactured housing should be excluded when comparing the primary market with the GSEs. The GSEs purchase these loans, but they have not played a significant role in the manufactured housing loan market. As emphasized by HUD in its 2000 GSE Rule, manufactured housing is an important source of home financing for lowincome families and for that reason, should be included in any analysis of affordable lending. However, for comparison purposes, data are also presented for the primary market defined without manufactured housing loans. Because this analysis focuses on metropolitan areas, it does not include the substantial number of manufactured housing loans originated in non-metropolitan areas.

Subprime Loans. Both GSEs also raised questions about whether subprime loans should be excluded when comparing the primary market with their performance. In its final 2000 GSE Rule, HUD argued that borrowers in the A-minus portion of the subprime market could benefit from the standardization and lower interest rates that typically accompany an active secondary market effort by the GSEs. A-minus loans are not nearly as risky as B&C loans and the GSEs have already started purchasing Aminus loans (and likely the lower "B" grade subprime loans as well). The GSEs themselves have mentioned that a large portion of borrowers in the subprime market could qualify as "A credit." This analysis includes the A-minus portion of the subprime market, or conversely, excludes the B&C portion of that market.

Unfortunately, HMDA does not identify subprime loans, much less separate them into their A-minus and B&C components.²³⁸ Randall M. Scheessele at HUD has identified approximately 200 HMDA reporters that primarily originate subprime loans and account for about 60–70 percent of the subprime market.²³⁹ To adjust HMDA data

for B&C loans, this analysis follows HUD's 2000 Rule which assumed that the B&C portion of the subprime market accounted for one-half of the loans originated by the subprime lenders included in Scheessele's list. ²⁴⁰ As shown below, the effects of adjusting the various market percentages for B&C loans are minor mostly because the analysis in this section focuses on home purchase loans, which historically have accounted for less than one quarter of the mortgages originated by subprime lenders—the subprime market is mainly a refinance market. ²⁴¹

Lender-Purchased Loans in HMDA. When analyzing HMDA data, Fannie Mae includes in its market totals those HMDA loans identified as having been purchased by the reporting lender, above and beyond loans that were originated by the reporting lender.²⁴² Fannie Mae contends that there are a subset of loans originated by brokers and subsequently purchased by wholesale lenders that are neither reported by the brokers nor the wholesale lenders as originations but are reported by the wholesale lenders as purchased loans. According to Fannie Mae, these HMDAreported purchased loans should be added to HMDA-reported originated loans to arrive at an estimate of total mortgage originations.

This rule's market definition includes only HMDA-reported originations; purchased loans are excluded from the market definition. While some purchased loans may not be reported as originations in HMDA (the Fannie Mae argument), there are several reasons for assuming that most HMDA-reported purchased loans are also reported in HMDA as market originations. *First*, Fed staff have told HUD that including purchased loans would result in double counting mortgage originations. ²⁴³ *Second*,

are available at http://www.huduser.org/publications/hsgfin.html.

²⁴⁰The one-half estimate is conservative as some observers estimate that B&C loans account for only 30–40 percent of the subprime market. However, varying the B&C share from 50 percent to 30 percent does not significantly change the following analysis of home purchase loans because subprime loans are mainly for refinance purposes. Overstating the share of B&C loans in this manner also allows for any differences in HMDA reporting of different types of loans—for example, if B&C loans account for 35 percent of all subprime loans, then assuming that they account for 50 percent is equivalent to assuming that B&C loans are reported in HMDA at 70 percent of the rate of other loans.

²⁴¹The reductions in the market shares are more significant for total loans, which include refinance as well as home purchase loans; for data on total loans, see Table A.19 in Section 10. Subprime lenders have been focusing more on home purchase loans recently. The home purchase share of loans originated by the subprime lenders in Scheessele's list increased from 26 percent in 1999 to 36 percent in 2000 before dropping to about 30 percent during the heavy refinancing years of 2001 and 2002.

²⁴² In 2001 (2002), lenders reported in HMDA that they purchased 851,735 (906,684) conventional conforming, home purchase loans in metropolitan areas; this compares with 2,763,230 (2,929,197) loans that these same lenders reported that they originated in metropolitan areas.

²⁴³ See Randall M. Scheeselle, HMDA Coverage of the Mortgage Market, Housing Finance Working

Continued

²³⁶ In this comparison, a higher special affordable percentage for HMDA-reported mortgage originations that lenders report as also being sold to the GSEs—as compared with the special affordable percentage for newly-originated mortgages that the GSEs report as being actually purchased by them—would suggest that HMDA market data are biased; that is, in this situation, the special affordable percentage for all mortgage originations reported in HMDA would likely be larger than the special affordable percentage for all new mortgage originations, including those not reported in HMDA as well as those reported in HMDA.

²³⁷The market definition in this section is narrower than the "Total Market" data presented earlier in Tables A.1 and A.2, which included all home loans below the conforming loan limit, that is, government loans as well as conventional conforming loans. The market share analysis reported in Section E.12 also examine the GSEs' role in the overall market.

²³⁸ And there is some evidence that many subprime loans are not even reported to HMDA, although there is nothing conclusive on this issue. See *Fair Lending/CRA Compass*, June 1999, p. 3.

²³⁹The list of subprime lenders as well as Scheessele's list of manufactured housing lenders

comparisons of HMDA-reported FHA data with data reported by FHA supports the Fed's conclusion. For instance, FHA's own data indicate that during 2001 FHA insured 752,319 home purchase loans in metropolitan areas; the sum of HMDAreported purchased home loans and HMDAreported originated home loans in metropolitan areas alone yields a much higher figure of 845,176 FHA-insured loans during 2001.244 While these calculations are for the FHA market (rather than the conventional market), they suggest that including HMDA-reported purchased loans in the market definition would overstate mortgage origination totals. Third, Abt Associates surveyed nine wholesale lenders and questioned them concerning their guidelines for reporting in HMDA loans purchased from brokers. Most of these lenders said brokered loans were reported as originations if they [the wholesale lender] make the credit decision; this policy is consistent with the Fed's guidelines for HMDA reporting. Abt Associates concluded that "brokered loans do seem more likely to be reported as originations * * *." 245

Finally, it should be noted that including purchased loans in the market definition does not significantly change the goalsqualifying shares of the market, mostly because borrower income data are missing for the majority of purchased loans. In addition, the low-income and underserved area shares for purchased and originated loans are rather similar. In 2001, the following shares for the conventional conforming home purchase market were obtained for purchased and originated loans: Low-income (25.8 percent for purchased loans, 28.3 percent for market originations), low-mod income (41.3 percent, 43.2 percent), and underserved areas (24.2 percent, 25.8 percent). In 2002, the comparisons were as follows: low-income (26.6 percent for purchased loans, 29.7 percent for market originations), low-mod income (42.3 percent, 45.3 percent), and underserved areas (28.8 percent, 27.2 percent).246

Paper No. HF–007. Office of Policy Development and Research, U.S. Department of Housing and Urban Development, July, 1998.

²⁴⁴ In this example, HMDA-reported purchased loans insured by FHA have been reduced from 411,930 to 100,251 by a procedure that accounts for missing data and overlapping purchased and originated loans. See Harold L. Bunce, *The GSEs' Funding of Affordable Loans: A 2000 Update*, Working Paper HF–013, Office of Policy and Development and Research, HUD, April 2002, for an alternative analysis showing that a market estimate based on adding HMDA-reported originations would substantially overstate the volume of FHA mortgage originations in metropolitan areas.

²⁴⁵ See Chapter III, "Reporting of Brokered and Correspondent Loans under HMDA", in Exploratory Study of the Accuracy of HMDA Data, by Abt Associates Inc. under contract for the Office of Policy Development and Research, HUD, February 12, 1999, page 18.

²⁴⁶The percentage shares for purchased loans are obtained after eliminating purchased loans without data and purchased loans that overlap with originated loans. The calculations included 138,536 purchased loans for 2001 and 182,290 purchased loans for 2002.

8. Technical Issues: Using HMDA Data To Measure the Characteristics of GSE Purchases and Mortgage Market Originations ²⁴⁷

This section discusses important technical issues concerning the use of HMDA data for measuring the GSEs' performance relative to the characteristics of mortgages originated in the primary market. The first issue concerns the reliability of HMDA data for measuring the borrower income and census tract characteristics of loans sold to the GSEs. Fannie Mae, in particular, contends that HMDA data understates the percentages of its business that qualify for the three housing goals. In its comments on the proposed 2000 Rule, Fannie Mae questioned HUD's reliance on HMDA data for measuring its performance. As discussed below, HMDA data on loans sold to the GSEs do not include prior-year (seasoned) loans that are sold to the GSEs. Since about one-fourth of GSE purchases in any particular year involve loans originated in prior years, HMDA data will not provide an accurate measure of the goals-qualifying characteristics of the GSEs total purchases when the characteristics of prior-year loans differ from those of newlyoriginated, current-year loans.

A related issue concerns the appropriate definition of the GSE data when making annual comparisons of GSE performance with the market. On the one hand, the GSE annual data can be expressed on a purchaseyear basis, which means that all GSE purchases in a particular year would be assigned to that particular year. Alternatively, the GSE annual data can be expressed on an origination-year basis, which means that GSE purchases in a particular year would be assigned to the calendar year that the GSE-purchased mortgage was originated; for example, a GSE's purchase during 2001 of a loan originated in 1999 would be assigned to 1999, the year the loan was originated. These two approaches are discussed further below.

A final technical issue concerns the reliability of HMDA for measuring the percentage of goals-qualifying loans in the primary market. Both GSEs refer to findings from a study by Jim Berkovec and Peter Zorn concerning potential bias in HMDA data.248 Based on a comparison of the borrower and census tract characteristics between Freddie-Mac-purchased loans (from Freddie Mac's own data) and loans identified in 1993 HMDA data as sold to Freddie Mac, Berkovec and Zorn conclude that HMDA data overstate the percentage of conventional conforming loans originated for lower-income borrowers and for properties located in underserved census tracts. If HMDA data overstate the percentage of goals-qualifying loans, then HUD's market benchmarks (which are based on HMDA data) will also be overstated. The analysis below does not support the Berkovec and Zorn findings—it appears that HMDA

data do not overstate the share of goalsqualifying loans in the market. The discussion below of the GSEs' purchases of prior-year and current-year loans also highlights the strategy of purchasing seasoned loans that qualify for the housing goals. The implications of this strategy for understanding recent shifts in the relative performance of Fannie Mae and Freddie Mac are discussed below in Section E.9.

a. GSEs' Purchases of "Prior-Year" and "Current-Year" Mortgages

There are two sources of loan-level information about the characteristics of mortgages purchased by the GSEs—the GSEs themselves and HMDA data. The GSEs provide detailed data on their mortgage purchases to HUD on an annual basis. As part of their annual HMDA reporting responsibilities, lenders are required to indicate whether their new mortgage originations or the loans that they purchase (from affiliates and other institutions) are sold to Fannie Mae, Freddie Mac or some other entity. There have been numerous studies by HUD staff and other researchers that use HMDA data to compare the borrower and neighborhood characteristics of loans sold to the GSEs with the characteristics of all loans originated in the market. One question is whether HMDA data, which is widely available to the public, provides an accurate measure of GSE performance, as compared with the GSEs' own data.249 Fannie Mae has argued that HMDA data understate its past performance, where performance is defined as the percentage of Fannie Mae's mortgage purchases accounted for by one of the goal-qualifying categories. As explained below, over the past six years, HMDA has provided rather reliable nationallevel information on the goals-qualifying percentages for the GSEs' purchases of 'current-year'' (i.e., newly-originated) loans, but not for their purchases of "prior-year" loans.250

In any given calendar year, the GSEs can purchase mortgages originated in that calendar year or mortgages originated in a prior calendar year. In 2001 and 2002, for example, purchases of prior-year mortgages accounted for approximately 20 percent of

²⁴⁷ Readers not interested in these technical issues may want to proceed to Section E.9, which compares GSE performance to the primary market.

²⁴⁸ See Jim Berkovec and Peter Zorn, "How Complete is HMDA? HMDA Coverage of Freddie Mac Purchases," The *Journal of Real Estate Research*, Vol. II, No. 1, Nov. 1, 1996.

 $^{^{249}\,\}mathrm{For}$ another discussion of this issue, see Randall M. Scheessele, HMDA Coverage of the Mortgage Market, Housing Finance Working Paper HF-007, Office of Policy Development and Research, Department of Housing and Urban Development, July 1998. Scheessele reports that HMDA data covered 81.6 percent of the loans acquired by Fannie Mae and Freddie Mac in 1996. The main reason for the under-reporting of GSE acquisitions is a few large lenders failed to report the sale of a significant portion of their loan originations to the GSEs. Also see the analysis of HMDA coverage by Jim Berkovec and Peter Zorn. "Measuring the Market: Easier Said than Done," Secondary Mortgage Markets. McLean VA: Freddie Mac, Winter 1996, pp. 18-21; as well as the Berkovec and Zorn study cited in the above footnote.

²⁵⁰ Between 1993 and 1996, the GSEs' purchases of prior-year loans were not as targeted as they were after 1996; thus, during this period, HMDA provided reasonable estimates of the goals-qualifying percentages of the GSEs' purchases of all (both current-year and prior-year) loans, with a few exceptions (see Table A.11).

the home loans purchased by each GSE.251

HMDA data provide information mainly on newly-originated mortgages that are sold to the GSEs'that is, HMDA data on loans sold to the GSEs will not include many of their purchases of prior-year loans. The implications of this for measuring GSE performance can be seen in Table A.11, which provides annual data on the borrower and census tract characteristics of GSE purchases, as measured by HMDA data and by the GSEs' own data. Table A.11 divides each of the GSEs' goals-qualifying percentages for a particular acquisition year into two components, the percentage for "prior-year" loans and the percentage for "current-year" loans.

²⁵¹ During the 1990s, the GSEs increased their purchases of seasoned loans; see Paul B. Manchester, *Goal Performance and Characteristics of Mortgages Purchased by Fannie Mae and Freddie Mac, 1998–2000,* Housing Finance Working Paper No. HF–015, Office of Policy Development and Research, HUD, May 2001.

Table A.11

Annual Trends in GSE Purchases and Single-Family Lending in Metropolitan Areas
Goal-Qualifying Home Purchase Mortgages, 1992-2002

			***********				•		Conforming
n		ie Mae Data		HMDA Data for	Prior Prior	eddie Mac Data Current	a	HMDA Data for	Market (W/O B&C
Borrower and	Prior	Current	4.11						Loans ¹⁾
Tract Characteristics	Year	Year	All	Fannie Mae	Year	Year	All	Freddie Mac	Loans"
Special Affordable									10.4
1992			0.0	6.3	<i>-</i> 1			6.5	10.4
1993	8.3	8.2	8.2	8.8	5.1	7.5	7.3	7.8	12.6
1994	9.7	10.9	10.7	11.4	7.7	8.2	8.2	9.2	14.1
1995	13.4	11.0	11.4	10.5	9.3	8.3	8.4	8.9	14.4
1996	10.8	10.3	10.4	10.5	8.5	8.9	8.8	9.4	15.0
1997	16.1	10.3	11.7	10.5	9.3	9.1	9.2	9.4	15.2
1998	18.1	12.0	13.2	10.7	12.1	11.4	11.5	9.7	15.4
1999	12.1	12.6	12.5	12.5	13.2	12.7	12.8	12.6	17.0
2000	13.5	13.2	13.3	13.7	17.9	13.4	14.7	13.3	16.8
2001	18.1	14.2	14.9	13.4	17.9	13.3	14.4	12.3	15.6
2002	18.8	15.8	16.3	15.5	15.8	15.8	15.8	14.5	16.3
Less Than Area Median Inco	ome								
1992				29.2				28.7	34.4
1993	30.8	33.8	33.5	35.0	25.2	32.5	31.9	32.3	38.9
1994	36.1	39.4	38.8	40.1	32.0	34.1	33.7	35.6	41.8
1995	39.0	38.2	38.3	37.1	34.2	32.5	32.8	33.9	41.4
1996	36.0	37.3	37.0	37.7	32.3	34.1	33.7	35.3	42.2
1997	42.3	37.0	38.3	37.5	34.2	34.8	34.7	35.4	42.5
1998	45.9	39.6	40.9	38.1	36.9	37.7	37.6	36.2	42.8
1999	38.0	40.6	40.0	40.2	39.4	41.2	40.8	41.0	44.8
2000	39.8	41.1	40.8	42.0	47.3	40.9	42.7	41.3	44,4
2001	45.3	42.3	42.9	41.5	43.8	40.5	41.3	39.2	42.9
2002	45.3	45.4	45.3	45.6	42.4	44.4	44.0	43.5	45.2
Underserved Areas									
1992				18.3				18.6	22.2
1993	23.8	19.3	20.3	18.2	19.4	18.0	18.2	17.6	21.9
1994	26.5	23.5	24.2	22.5	21.0	19.2	19.6	19.2	24.3
1995	27.4	23.8	24.6	22.8	22.3	19.2	19.9	19.1	25.4
1996	23.4	21.8	22.3	21.6	22.2	18.9	19.6	19.0	24.9
1997	29.1	20.6	23.0	21.0	22.1	19.1	19.7	18.6	24.9
1998	28.3	20.8	22.7	19.6	21.9	19.3	19.8	17.4	24.2
1999	21.9	20.0	20.4	20.3	23.1	20.3	20.9	19.3	25.2
2000	26.6	22.4	23.4	22.5	23.9	21.2	22.0	20.9	26.4
2001	28.3	23.3	24.4	22.0	25.7	21.3	22.3	19.5	25.2
2002	32.7	25.5	26.7	24.6	29.4	25.0	25.8	21.4	26.4

Notes: The Fannie Mae and Freddie Mac data for their purchases of "Prior Year" mortgages, "Current Year" mortgages, and "All" mortgages are from the loan-level data that they provide to HUD. All mortgages are conventional conforming home purchase mortgages. The "HMDA Data for (GSE)" are those mortgages that HMDA identifies as being sold to the GSEs. The Conforming Market data are from HMDA data. Mortgages with a loan amount greater than six times borrower income are excluded for the purposes of the low- and moderate-income and special affordable analyses. In both the GSE and market analyses, mortgages classified as special affordable include mortgages from very-low-income borrowers and low-income borrowers living in low-income census tracts. Because missing value percentages differ between GSE and HMDA data, mortgages with missing data are excluded from both the GSE and market data.

¹ The adjustment assumes that B&C loans represent one-half of the subprime market. The adjustment for home purchase loans is small because subprime (B&C) loans are mainly refinance loans. For further discussion, see text.

Consider Fannie Mae's special affordable purchases in 2002. According to Fannie Mae's own data, 16.3 percent of its purchases during 2002 were special affordable loans. According to HMDA data, only 15.5 percent of loans sold to Fannie Mae fell into the special affordable category. In this case, HMDA data underestimate the special affordable share of Fannie Mae's purchases during 2002. What explains these different patterns in the GSE and HMDA data? The reason that HMDA data underestimate the special affordable percentage of Fannie Mae's 2002 purchases can be seen by disaggregating Fannie Mae's purchases during 2002 into their prior-year and current-year components. Table A.11 shows that the overall figure of 16.3 percent for special affordable purchases is a weighted average of 18.8 percent for Fannie Mae's purchases during 2002 of prior-year mortgages and 15.8 percent for its purchases of current-year purchases. The HMDA-reported figure of 15.5 percent is based mainly on newly-mortgaged (current-year) loans that lenders reported as being sold to Fannie Mae during 2002. The HMDA figure is similar in concept to the current-year percentage from the GSEs' own data. And the HMDA figure and the GSE current-year figure are practically the same in this case (15.5 versus 15.8 percent). Thus, the relatively large share of special affordable mortgages in Fannie Mae's purchases of

prior-year mortgages explains why Fannie Mae's own data show an overall (both prior-year and current-year) percentage of special affordable loans that is higher than that reported for Fannie Mae in HMDA data.

b. Reliability of HMDA Data

With the above explanation of the basic differences between GSE-reported and HMDA-reported loan information, issues related to the reliability of HMDA data can now be discussed. Table A.12 presents the same information as Table A.11, except that the data are aggregated for the years 1993-5, 1996-2002, and 1999-2002. Comparing HMDA-reported data on GSE purchases with GSE-reported current-year data suggests that, on average, HMDA data have provided reasonable estimates of the goals-qualifying percentages for the GSEs' current-year purchases (with the exception of Freddie Mac's underserved area loans, as discussed below). For example, Fannie Mae reported that 13.0 percent of the current-year loans it purchased between 1996 and 2002 were for special affordable borrowers. In their HMDA submissions, lenders reported a nearly identical figure of 12.7 percent for the special affordable share of loans that they sold to Fannie Mae. The corresponding numbers for Freddie Mac were 12.4 percent reported by them and 11.9 percent reported by HMDA. During the same period, both Fannie Mae and HMDA reported that approximately 22

percent of current-year loans purchased by Fannie Mae financed properties in underserved areas. However, Freddie Mac reported that 21.0 percent of the current-year loans it purchased between 1996 and 2002 financed properties in underserved areas, a figure somewhat higher than the 19.5 percent that HMDA reported as underserved area loans sold to Freddie Mac during that period.²⁵²

²⁵² Freddie Mac's underserved area figure for 2002 showed a particularly large discrepancy—as shown in Table A.11, Freddie Mac reported that 25.0 percent of the current-year loans it purchased during 2002 financed properties in underserved areas, a figure much higher than the 21.4 percent that HMDA reported as underserved area loans sold to Freddie Mac during 2002. This is the largest discrepancy in Table A.11, and it is not clear what explains it. This downward bias for HMDA data, is the opposite of that suggested by Berkovec and Zorn, who argued that affordability percentages from HMDA data are biased upward.

Table A.12

HMDA Versus GSE Reporting of GSE Loan Characteristics Single-Family-Owner Home Loans in Metropolitan Areas, 1993-2002

၁	Ratio: cd HMDA-Reported/ ss GSE Reported		96'0				66'0				0.93	
Freddie Mac	HMDA-Reported GSE Purchases	8.6	11.9	13.2		33.9	39.2	41.2		18.6	19.5	20.3
	GSE-Reported Current-Year Loan Purchases	8.0	12.4	13.9		33.0	39.6	41.9		18.8	21.0	22.1
	Ratio: HMDA-Reported/ GSE Reported	1.03	86.0	0.99		1.01	1.00	1.00		96:0	0.98	86.0
Fannie Mae	HMDA-Reported GSE Purchases	10.2	12.7	13.9		37.2	40.9	42.6		21.1	21.9	22.6
	GSE-Reported Current-Year Loan Purchases	6.6	13.0	14.1		36.8	41.0	42.6		22.0	22.4	23.1
	Borrower and Tract Characteristics	Special Affordable 1993-1995	1996-2002	1999-2002	Less than Area Median Income	1993-1995	1996-2002	1999-2002	Underserved Areas	1993-1995	1996-2002	1999-2002

income calculations. Special affordable includes very low-income borrowers and low-income borrowers in low-income census tracts. Data with missing values are excluded. The data are from the loan-level data that they provide to HUD. All mortgages are conventional conforming mortgages. The "HMDA-Reported" data include information on conventional conforming loans sold to the GSEs as reported by lenders in HMDA. Loans with a loan-to-income ratio greater than six are excluded from the borrower Source: The Fannie Mae and Freddie Mac "current year" data include information on their purchases of home loan originated in the same year they acquired the loans.

The facts that the GSE (both Fannie Mae and Freddie Mac) and HMDA figures for special affordable and low-mod loans are similar, and that the Fannie Mae and HMDA figures for underserved areas are similar. suggest that the Berkovec and Zorn conclusions about HMDA being upward biased are wrong.²⁵³ For the 1996-to-2002 period, the discrepancies reported in Table A.11 as well as Table A.12 are mostly consistent with HMDA being biased in a downward direction, not an upward direction as Berkovec and Zorn contend.254 In particular, the Freddie-Mac-reported underserved area percentage being larger than the HMDA-reported underserved area percentage suggests a downward bias in HMDA. The more recent and complete (Fannie Mae data as well as Freddie Mac data) analysis does not support the Berkovec and Zorn finding that HMDA overstates the goals-qualifying percentages of the market. 255 c. Purchase-Year Versus Origination-Year Reporting of GSE Data

In comparing the GSEs' performance to the primary market, HUD has typically expressed the GSEs' annual performance on a purchase-year basis. That is, all mortgages (including both current-year mortgages and prior-year mortgages) purchased by a GSE in a particular year are assigned to the year of GSE purchase. The approach of including a GSE's purchases of both "current-year" and "prior-year" mortgages gives the GSE full credit for their purchase activity in the year

that the purchase actually takes place; this approach is also consistent with the statutory requirement for measuring GSE performance under the housing goals. However, this approach results in an obvious "apples to oranges" problem with respect to the HMDAbased market data, which include only newly-originated mortgages (i.e., current-year mortgages). To place the GSE and market data on an "apples to apples" basis, HUD has also used an alternative approach that expresses the GSE annual data on an origination-year basis. In this case, all purchases by a GSE in any particular year would be fully reported but they would be allocated to the year that they were originated, rather than to the year they were purchased. Under this approach, a GSE's data for the year 2000 would not only include that GSE's purchases during 2000 of newlyoriginated mortgages but also any year-2000originations purchased in later years (i.e. during 2001 and 2002 in this analysis). This approach places the GSE and the market data on a consistent, current-year basis. In the above example, the market data would present the income and underserved area characteristics of mortgages originated in 2000, and the GSE data would present the same characteristics of all year-2000mortgages that the GSE has purchased to date (i.e., through year 2002). 256

Below, results will be presented for both the purchase-year and origination-year approaches. Following past HUD studies that have compared GSE performance with the primary market, most of the analysis in this section reports the GSE data on a purchase-year basis; however, the main results are repeated with the GSE data reported on an origination-year basis. This allows the reader to compare any differences in findings about how well the GSEs have been doing relative to the market.

9. Affordable Lending by the GSEs: Home Purchase Loans

This section compares the GSEs' affordable lending performance with the primary market for the years 1993-2002. The analysis in this section begins by presenting the GSE data on a purchase-year basis. As discussed above, the GSE data that are reported to HUD include their purchases of mortgages originated in prior years as well as their purchases of mortgages originated during the current year. The market data reported by HMDA include only mortgages originated in the current year. This means that the GSEversus-market comparisons are defined somewhat inconsistently for any particular calendar year. Each year, the GSEs have newly-originated loans available for purchase, but they can also purchase loans from a large stock of seasoned (prior-year) loans currently being held in the portfolios of depository lenders. One method for making the purchase-year data more consistent is to aggregate the data over several years, instead of focusing on annual data. This provides a clearer picture of the types of loans that have been originated and are available for purchase by the GSEs. This approach is taken in Table A.13, which is discussed below. Another method for making the GSE and market data consistent is to express the GSE data on an origination-year basis; that approach is taken in Table A.16, which is discussed after presenting the annual results on a purchase-year basis.

a. Longer-Term Performance, 1993-2002 and 1996-2002

Table A.13 summarizes the funding of goals-qualifying mortgages by the GSEs, depositories and the conforming market for the ten-year period between 1993 and 2002. Data are also presented for two important sub-periods: 1993-95 (for showing how much the GSEs have improved their performance since the early-to-mid 1990s); and 1996-2002 (for analyzing their performance since the current definitions of the housing goals were put into effect). Given the importance of the GSEs for expanding homeownership, this section focuses on home purchase mortgages, and the next section will examine first-time homebuyer loans. Section IV below will briefly discuss the GSEs' overall performance, including refinance and home purchase loans. Several points stand out concerning the affordable lending performance of Freddie Mac and Fannie Mae over the two longer-term periods, 1993-2002 and 1996-2002.

²⁵³ The data in Table A.12 that support Berkovec and Zorn are the 1993–95 special affordable and low-mod data (particularly for Freddie Mac) that show HMDA over reporting percentages by more than a half percentage point. Otherwise, the data in Table A.12, as well as Table A.11, do not present a picture of HMDA's having an upward bias in reporting targeted loans. In fact, the recent years' data suggest a downward bias in HMDA's reporting of targeted loans.

²⁵⁴ Of course, on an individual year basis, the GSEs' current-year data can differ significantly from the HMDA-reported data on GSE purchases. The other annual data reported in Table A.11 show a mixture of results—in some cases the HMDA percentage is larger than the GSE—current year" percentage (e.g., Fannie Mae's special affordable purchases in 2000) while in other cases the HMDA percentage is smaller than the GSE current year percentage (e.g., Freddie Mac's underserved areas purchases in recent years). As noted in the text, the differential is typically in the opposite direction to that predicted by Berkovec and Zorn, particularly on the underserved areas category.

²⁵⁵ Table A.12 also includes aggregates for the more recent period, 1999–2002. The ratios of HMDA-reported-to-GSE-reported averages for this sub-period are similar to those reported for 1996–2002.

²⁵⁶ Under the origination-year approach, GSE performance for any specific origination year (say year 2000) at the end of a particular GSE purchase year (say year 2002) is subject to change in the future years. Table A.16 (in Section E.9 below) reports that 13.7 percent of year-2000 mortgage originations that Fannie Mae purchased through year 2002 qualify as special affordable; the special affordable share for the market was 16.8 percent in 2000, which indicates that, to date, Fannie Mae has lagged the primary market in funding special affordable mortgages originated during 2000. However, Fannie Mae's special affordable performance could change in the future as Fannie Mae continues to purchase year-2000 originations during 2003 and the following years. Of course, whether Fannie Mae's future purchases result in it ever leading the 2000-year market is not known at

Table A.13

GSE Purchases and Single-Family Lending in Metropolitan Areas Goal-Qualifying Home Purchase Mortgages, 1993-2002

			Ratio Fannie Mae/	Depo	Depository	Conforming Market	Ratio of to Market	Ratio of GSE to Market (W/O B&C)
Borrower and Tract Characteristics	Fannie Mae	Freddie Mac	Freddie Mac	Total	Portfolio	W/O B&C	Fannie Mae	Freddie Mac
Special Affordable								
1993-2002	12.7 %	11.8 %	1.08	15.4 %	16.9 %	15.4 %	0.82	0.77
1993-1995	10.0	8.0	1.25	14.6	17.0	13.7	0.73	0.58
1996-2002	13.5	12.8	1.05	15.6	16.8	16.0	0.84	0.80
1999-2002	14.4	14.5	0.99	16.4	16.9	16.4	0.88	0.88
2000-2002	15.0	14.9	1.01	16.4	17.1	16.2	0.93	0.92
Less than Area Median Income								
1993-2002	40.2 %	38.3 %	1.05	42.8 %	43.3 %	43.0 %	0.93	0.89
1993-1995	36.7	32.8	1.12	41.8	44.0	40.8	0.00	0.80
1996-2002	41.2	39.8	1.04	43.1	43.0	43.6	0.94	0.91
1999-2002	42.5	42.3	1.00	44.2	43.1	44.3	96.0	0.95
2000-2002	43.2	42.7	1.01	44.2	43.3	44.2	0.98	0.97
Underserved Areas								
1993-2002		21.2 %	1.10	24.7	26.5	25.1 %	0.93	0.84
1993-1995	22.8	19.2	1.19	24.1	26.8	24.0	0.95	0.80
1996-2002	23.5	21.7	1.08	24.9	26.4	25.4	0.93	0.85
1999-2002	24.0	22.9	1.05	25.7	26.8	25.8	0.93	0.89
2000-2002	24.9	23.4	1.06	79.1	27.2	26.0	0.96	0.00

six are excluded from the borrower income calculations. "Total Depositories" data are loans originated by HMDA reporters regulated by FDIC, OTS, OCC, FRB, and All mortgages are conventional conforming mortgages. The Depository and Conforming Market data are from HMDA; loans with a loan-to-income ratio greater than the National Credit Union Administration; they consist mainly of banks, thrifts, and their subsidieries. The "Depository Portfolio" data refer to new originations that Source: The Fannie Mae and Freddie Mac data include information on all their purchases of home loans and are from the loan-level data that they provide to HUD. are not sold by banks and thrift institutions and thus are retained in depository portfolios. "Conforming Market W/O B&C" data are the average market percentages after deducting estimates of B&C loans (see text for explanation). Special affordable includes very low-income borrowers and low-income borrowers in low-income census tracts. Data with missing values are excluded. Freddie Mac lagged both Fannie Mae and the primary market in funding affordable home loans in metropolitan areas between 1993 and 2002. During that period, 11.8 percent of Freddie Mac's mortgage purchases were for special affordable (mainly very-low-income) borrowers, compared with 12.7 percent of Fannie Mae's purchases, 15.4 percent of loans originated by depositories, 257 and 15.4 percent of loans originated in the conforming market without B&C loans. 258

Although Freddie Mac consistently improved its performance during the 1990s, a similar pattern characterized the 1996–2002 period. During that period, 39.8 percent of Freddie Mac's purchases were for low- and

moderate-income borrowers, compared with 41.2 percent of Fannie Mae's purchases, 43.1 percent of loans originated by depositories, and 43.6 percent of loans originated in the conventional conforming market. Over the same period, 21.7 percent of Freddie Mac's purchases financed properties in underserved neighborhoods, compared with 23.5 percent of Fannie Mae's purchases, 24.9 percent of depository originations, and 25.4 percent of loans originated in the primary market.

Fannie Mae's affordable lending performance was better than Freddie Mac's over the 1993 to 2002 period as well as during the 1996 to 2002 period. However, Fannie Mae lagged behind depositories and the overall market in funding affordable loans during both of these periods (see above paragraph). Between 1996 and 2002, the 'Fannie-Mae-to-market'' ratio was only 0.84 on the special affordable category, obtained by dividing Fannie Mae's performance of 13.5 percent by the market's performance of 16.0 percent. Fannie Mae's market ratio was 0.94 on the low-mod category and 0.93 on the underserved area category. The "Freddie-Mac-to-market" ratios were lower'0.80 for

special affordable, 0.91 for low-mod, and 0.85 for underserved areas.

The above analysis has defined the market to exclude B&C loans, which HUD believes is the appropriate market definition. However, to gauge the sensitivity of the results to how the market is defined, Table A.14 shows the effects on the market percentages for different definitions of the conventional conforming market, such as excluding manufactured housing loans, small loans, and all subprime loans (i.e., the Aminus portion of the subprime market as well as the B&C portion). For example, the average special affordable (underserved area) market percentage for 1996-2002 would fall by about 0.2 (0.6) percentage point if the remaining subprime loans (i.e., the A-minus loans) were also excluded from the market totals. Excluding manufactured housing loans in metropolitan areas would reduce the above market percentage for special affordable (underserved area) loans by 1.5 (1.1) percentage points. The above findings with respect to the GSEs' longer-term performance are not much affected by the choice of market definition.

²⁵⁷ As shown in Table A.13, the depository percentage is higher (16.9 percent) if the analysis is restricted to those newly-originated loans that depositories do not sell (the latter being a proxy for loans held in depositories' portfolios). Note that during the recent, 1999-to-2002 period (also reported in Table A.13), there is less difference between the two depository figures.

²⁵⁸ Unless stated otherwise, the market in this section is defined as the conventional conforming market without estimated B&C loans.

Table A.14

Annual Trends in GSE Purchases and Single-Family Lending in Metropolitan Areas Goal-Qualifying Home Purchase Mortgages, 1996-2002 Various Market Definitions

		ਲ	W/O Mfg		12.8	12.9	13.1	14.6	14.9	14.4	15.7	14.2	14.9	15.0		39.4	39.5	40.0	42.0	42.1	41.3	44.4	41.4	42.5	42.7		23.0	23.1	22.3	23.5	25.0	24.2	25.9	24.0	24.7	
	W/O B&C	and LT \$15K	Loans		14.2	14.5	14.9	16.5	16.2	15.3	16.0	15.5	16.0	15.8		4.14	41.7	42.3	44.3	43.8	42.5	44.8	43.1	43.8	43.7		24.5	24.5	23.8	24.9	26.8	24.9	26.2	25.0	25.5	
ıns	W/O B&C	and Mfg	Loans		13.3	13.4	13.4	14.9	15.2	14.7	15.9	14.5	15.2	15.3		39.9	40.0	40.4	42.4	42.5	41.8	44.7	41.9	42.9	43.1		23.4	23.4	22.5	23.7	25.3	24.5	26.2	24.3	25.0	
arket Originatio	O/M	B&C	Loans		15.0	15.2	15.4	17.0	16.8	15.6	16.3	16.0	16.4	16.2		42.2	42.5	42.8	44.8	44.4	42.9	45.2	43.6	44.3	44.2		24.9	24.9	24.2	25.2	26.4	25.2	26.4	25.4	25.8	
Conventional Conforming Market Originations	0/M	Subprime	Loans		15.0	15.3	15.2	16.7	16.4	15.5	16.2	15.8	16.2	16.0		42.2	42.4	42.7	44.4	43.9	42.7	45.0	43.4	44.0	43.9		24.8	24.7	23.6	24.6	25.6	24.6	25.6	24.8	25.1	
Conventional	W/O Mfg	and Less Than	\$15K Loans		12.8	13.0	13.4	15.0	15.3	14.6	15.8	14.4	15.2	15.2		39.4	39.6	40.3	42.5	42.6	41.6	44.5	41.7	42.8	42.9		23.1	23.3	22.8	24.1	25.8	24.9	26.7	24.6	25.4	
	W/O Loans	Less	Than \$15K		14.2	14.6	15.0	16.8	16.5	15.5	16.1	15.6	16.2	16.0		41.4	41.8	42.5	44.7	44.1	42.7	45.0	43.3	1.4	43.9		24.5	24.8	24.3	25.5	26.8	25.5	27.0	25.6	26.2	
		W/O Mfg	Loans Only		13.3	13.5	13.7	15.3	15.6	14.9	16.0	14.7	15.5	15.5		40.0	40.1	40.7	42.9	43.0	42.0	44.9	42.2	43.2	43.4		23.5	23.7	23.1	24.4	26.1	25.2	27.0	24.9	25.7	
		Total	Market		15.0	15.3	15.6	17.3	17.1	15.8	16.4	16.1	16.6	16.4		42.2	42.5	43.0	45.2	44.8	43.2	45.3	43.9	44.6	44.4		25.0	25.2	24.6	25.8	27.1	25.8	27.2	25.9	26.5	
		Freddie Mac	Purchases		8.8	9.2	11.5	12.8	14.7	14.4	15.8	12.8	14.5	14.9		33.7	34.7	37.6	40.8	42.7	41.3	44.0	39.8	42.3	42.7		19.6	19.7	19.8	20.9	22.0	22.3	25.8	21.7	22.9	
		Fannie Mae	Purchases		10.4	11.7	13.2	12.5	13.3	14.9	16.3	13.5	14.4	15.0		37.0	38.3	40.8	40.0	40.8	42.9	45.3	41.2	42.5	43.2		22.3	23.0	22.7	20.4	23.4	24.4	26.7	23.5	24.0	
			Borrower and Tract Characteristics	Special Affordable	9661	1997	8661	6661	2000	2001	2002	1996-2002	1999-2002	2000-2002	Less Than Area Median Income	9661	1661	1998	1999	2000	2001	2002	1996-2002	1999.2002	2000-2002	Underserved Areas	9661	1661	1998	6661	2000	2001	2002	1996-2002	1999-2002	

Source: The Fannie Mae and Freddie Mac percentages for 1996 to 2002 are based on the loan-level mortgage purchase data that they provide to HUD. All mortgages are conventional conforming home purchase mortgages. The Conforming Market data are from HMDA; loans with a loan-to-income-ratio greater than six are excluded from all borrower income calculations. See the text for an explanation of the adjustments for manufactured housing (mfg), subprime, and B&C loans. Special affordable includes very low-income census tracts. Data with missing values are excluded.

b. Recent Performance, 1999-2002

This and the next subsection focus on the average data for 1999-2002 in Table A.13 and the annual data reported in Table A.14. As explained below, the annual data are useful for showing shifts in the relative positions of Fannie Mae and Freddie Mac that began in 1999, and for highlighting the improvements made by Fannie Mae during 2001 and 2002 (which were the first two years under HUD's higher goal levels) and by Freddie Mac during 2002. Between 1993 and 1998, Freddie Mac's performance fell below Fannie Mae's, but a sharp improvement in Freddie Mac's performance during 1999 pushed it pass Fannie Mae on all three goals-qualifying categories. In 2000, Fannie Mae improved its underserved areas performance enough to surpass Freddie Mac on that category, while Freddie Mac continued to out-perform Fannie Mae on the borrower-income categories (special affordable and low-mod). During 2001 and 2002, Fannie Mae improved its performance enough to surpass Freddie Mac on all three goals-qualifying categories and to essentially match the market during these two years.

Consider first the average data for 1999–2002 reported in Table A.13. During this recent period, Freddie Mac's average performance was similar to Fannie Mae's performance for the borrower income categories. Between 1999 and 2002, 14.5 percent of Freddie Mac's purchases and 14.4 percent Fannie Mae's mortgage purchases consisted of special affordable loans, compared with a market average of 16.4

percent. In addition, Freddie Mac purchased low-mod loans at about the same rate as Fannie Mae during this period-42.3 percent for the Freddie Mac, 42.5 percent for Fannie Mae, and 44.3 percent for the market. Freddie Mac (22.9 percent) purchased underserved area loans at a lower rate than Fannie Mae (24.0 percent) and the primary market (25.8 percent). As these figures indicate, both Fannie Mae and Freddie Mac continued to lag the market during this recent four-year period. Both GSEs' market ratios were 0.88 for special affordable loans and approximately 0.95 for low-mod loans. Although less than one (where one indicates equal performance with the market), the "Fannie-Mae-to-market" ratio (0.93) for the underserved area category was higher than the "Freddie-Mac-to-market" ratio (0.89).

Fannie Mae had an uncharacteristically poor year in 1999. Thus, averages for 2000–2002 are also presented in Table A.13, dropping 1999. These data show an increase in Fannie Mae's performance relative to the market, particularly on the special affordable and underserved areas categories. Between 2000 and 2002, special affordable (underserved area) loans accounted for 15.0 percent (24.9 percent) of Fannie Mae's purchases, compared with 16.2 percent (26.0 percent) for the market.

Table A.14 shows the effects on the market percentages for 1999–2002 (as well as 2000–2002) of different definitions of the conventional conforming market. Excluding manufactured housing loans (as well as B&C loans) in metropolitan areas would reduce

the 1999-2002 market percentage for special affordable loans from 16.4 percent to 15.2 percent, which would raise the GSEs' market ratios from approximately 0.88 to 0.95. Similarly, excluding manufactured housing loans would reduce the 1999-2002 market percentage for underserved areas from 25.8 percent to 25.0 percent, which would raise Fannie Mae's market ratio from 0.93 to 0.96 and Freddie Mac's, from 0.89 to 0.92. As shown in Table A.14, Fannie Mae is even closer to the market averages if the year 1999 is dropped—over the 2000–2002 period, Fannie Mae's performance on the underserved area category is practically at market levels under the alternative definitions of the market, and its performance on the special affordable and low-mod categories to close to market levels.

c. GSEs' Performance-Annual Data

Freddie Mac's Annual Performance. As shown by the annual data reported in Table A.15, Freddie Mac significantly improved its purchases of goals-qualifying loans during the 1990s. Its purchases of loans for special affordable borrowers increased from 6.5 percent of its business in 1992 to 9.2 percent in 1997, and then jumped to 14.7 percent in 2000 before falling slightly to 14.4 percent in 2001 and rising again to 15.8 percent in 2002. The underserved areas share of Freddie Mac's purchases increased at a more modest rate, rising from 18.6 percent in 1992 to 22.3 percent by 2001; it then jumped to 25.8 percent in 2002.

Table A.15

Annual Trends in GSE Purchases and Single-Family Lending in Metropolitan Areas
Goal-Qualifying Home Purchase Mortgages, 1992-2002

			Ratio of	Conforming		of GSE
D	Fannie Mae	Enddin Man	Fannie Mae to	Market (W/O		(W/O B&C)
Borrower and Tract Characteristics Special Affordable	Fannie Mae	Freddie Mac	Freddie Mac	B&C Loans)	Fannie Mae	Freddie Mac
1992	6.3 %	6.5 %	0.97	10.4 %	0.61	0.63
1992	8.2	7.3	1.12	10.4 %	0.65	0.58
1993	10.7	8.2	1.12	14.1	0.76	0.58
1994	11.4	8.4	1.36	14.1	0.79	0.58
1993	10.4	8.8	1.18	15.0	0.69	0.59
1997	11.7	9.2	1.18	15.0	0.77	0.61
1997	13.2		1.15	15.4	0.77	
1998	13.2	11.5 12.8	0.98	17.0	0.74	0.75 0.75
2000		14.7	0.90			
2001	13.3			16.8	0.79	0.88
	14.9	14.4	1.03	15.6	0.96	0.92
2002	16.3	15.8	1.03	16.3	1.00	0.97
Less Than Area Median Income						
1992	29.2	28.7	1.02	34.4	0.85	0.83
1993	33.5	31.9	1.05	38.9	0.86	0.82
1994	38.8	33.7	1.15	41.8	0.93	0.81
1995	38.3	32.8	1.17	41.4	0.93	0.79
1996	37.0	33.7	1.10	42.2	0.88	0.80
1997	38.3	34.7	1.10	42.5	0.90	0.82
1998	40.8	37.6	1.09	42.8	0.95	0.88
1999	40.0	40.8	0.98	44.8	0.89	0.91
2000	40.8	42.7	0.96	44.4	0.92	0.96
2001	42.9	41.3	1.04	42.9	1.00	0.96
2002	45.3	44.0	1.03	45.2	1.00	0.97
Underserved Areas						
1992	18.3	18.6	0.98	22.2	0.82	0.84
1993	20.3	18.2	1.12	21.9	0.93	0.83
1994	24.2	19.6	1.23	24.3	1.00	0.81
1995	24.6	19.9	1.24	25.4	0.97	0.78
1996	22.3	19.6	1.14	24.9	0.90	0.79
1997	23.0	19.7	1.17	24.9	0.92	0.79
1998	22.7	19.8	1.15	24.2	0.94	0.82
1999	20.4	20.9	0.98	25.2	0.81	0.83
2000	23.4	22.0	1.06	26.4	0.89	0.83
2001	24.4	22.3	1.09	25.2	0.97	0.88
2002	26.7	25.8	1.03	26.4	1.01	0.98

Source: The Fannie Mae and Freddie Mac percentages for 1993 to 2002 are from the loan-level mortgage purchase data that they provide to HUD; the 1992 GSE data are from HMDA. All mortgages are conventional conforming home purchase mortgages. The Conforming Market data are from HMDA; see text for an explanation of the market adjustment for B&C loans. Loans with a loan-to-income-ratio greater than six are excluded from the borrower income calculations. Special affordable includes very low-income borrowers and low-income borrowers living in low-income census tracts. Data with missing values are excluded.

With its improved performance, Freddie Mac closed its gap with the market in funding goals-qualifying loans. In 2002, special affordable loans accounted for 15.8 percent of Freddie Mac's purchases and 16.3 percent of loans originated in the conventional conforming market, which produces a "Freddie-Mac-to-market" ratio of 0.97 (15.8 divided by 16.3). Table A.15 shows the trend in the "Freddie-Mac-to-market" ratio from 1992 to 2002 for each of the goalsqualifying categories. For the special affordable and low-mod categories, Freddie Mac's performance relative to the market remained flat (at approximately 0.60 and 0.80, respectively) through 1997; by 2002, the "Freddie-Mac-to-market" ratios had risen to 0.97 for both the special affordable and lowmod categories.

Surprisingly, Freddie Mac did not make much progress during the 1990s closing its gap with the market on the underserved areas category. The "Freddie-Mac-to-market" ratio for underserved areas was approximately the same in 2000 (0.83) as it was in 1992 (0.84). While it rose to 0.88 in 2001, that was due more to a decline in the market level than to an improvement in Freddie Mac's performance. However, due to a substantial increase in Freddie Mac's underserved area percentage from 22.3 percent in 2001 to 25.8 percent in 2002, Freddie Mac's performance approached market performance (26.4 percent) during 2002. 259 In the ten years under the housing goals, the year 2002 represented the first time that Freddie Mac's performance in purchasing home loans in underserved areas had ever been within two percentage points of the market's performance.260

Fannie Mae's Annual Performance. With respect to purchasing affordable loans, Fannie Mae followed a different path than Freddie Mac. Fannie Mae improved its performance between 1992 and 1998 and made much more progress than Freddie Mac in closing its gap with the market. In fact, by 1998, Fannie Mae's performance was close to that of the primary market for some important components of affordable lending. In 1992, special affordable loans accounted for 6.3 percent of Fannie Mae's purchases and 10.4 percent of all loans originated in the conforming market, giving a "Fannie Mae-tomarket" ratio of 0.61. By 1998, this ratio had risen to 0.86, as special affordable loans had increased to 13.2 percent of Fannie Mae's purchases and to 15.4 percent of market originations. A similar trend in market ratios can be observed for Fannie Mae on the underserved areas category. In 1992, underserved areas accounted for 18.3 percent of Fannie Mae's purchases and 22.2 percent of market originations, for a "Fannie Mae-tomarket" ratio of 0.82. By 1998, underserved areas accounted for 22.8 percent of Fannie

Mae's purchases and 24.2 percent of market originations, for a higher ''Fannie Mae-to-market'' ratio of 0.94.²⁶¹

The year 1999 saw a shift in the above patterns, with Fannie Mae declining in overall performance while the share of goalsqualifying loans in the market increased. Between 1998 and 1999, the special affordable share of Fannie Mae's business declined from 13.2 percent to 12.5 percent while this type of lending in the market increased from 15.4 percent to 17.0 percent. For this reason, the "Fannie-Mae-to-market" ratio for special affordable loans declined sharply from 0.86 in 1998 to 0.74 in 1999. The share of Fannie Mae's purchases in underserved areas also declined, from 22.7 percent in 1998 to 20.4 percent in 1999, which lowered the "Fannie-Mae-to-market" ratio from 0.94 to 0.81.

After declining in 1999, Fannie Mae's performance rebounded in 2000, particularly on the underserved areas category. Fannie Mae's underserved areas percentage jumped by three percentage points from 20.4 percent in 1999 to 23.4 percent in 2000. The 2000 figure was similar to its level in 1997 but below Fannie Mae's peak performances of 24-25 percent during 1994 and 1995. Between 1999 and 2000, the "Fannie-Mae-tomarket" ratio for underserved areas increased from 0.82 to 0.89. Fannie Mae improved its performance on the special affordable goal at a more modest rate. Fannie Mae's special affordable percentage increased by 0.8 percentage points from 12.5 percent in 1999 to 13.3 percent in 2000. The 2000 figure was similar to its previous peak level (13.2 percent) in 1998). The "Fannie-Mae-tomarket" ratio for special affordable loans increased from 0.74 in 1999 to 0.79 in 2000, with the latter figure remaining below Fannie Mae's peak market ratio (0.86) in 1998.

Fannie Mae continued its improvement in purchasing targeted home loans during 2001, at a time when the conventional conforming market was experiencing a decline in affordable lending, and again in 2002, at a time when the conventional conforming market was increasing enough to return approximately to its year-2000 level. Thus, during the 2000-to-2002 period, Fannie Mae significantly improved its targeted purchasing performance while the primary market originated targeted home loans at about the same rate in 2002 as it did in 2000. As a result, Fannie Mae's performance during 2001 approached the market on the special affordable and underserved area categories and matched the market on the low-mod category. In 2002, Fannie Mae matched the market on the special affordable category. and slightly outperformed the market on the low-mod and underserved areas categories.

As shown in Table A.15, Fannie Mae increased its special affordable percentage by 1.6 percentage points, from 13.3 percent in

2000 to 14.9 percent in 2001, and then increased it further to 16.3 percent in 2002, the latter being the same as the market's performance of 16.3 percent. The "Fannie-Mae-to-market" ratio for special affordable loans jumped from 0.79 in 2000 to 1.00 in 2002. Between 2000 and 2001, Fannie Mae increased its low-mod percentage from 40.8 percent to 42.9 percent at the same time that the low-mod share of the primary market was falling from 44.4 percent to 42.9 percent, placing Fannie Mae at the market's performance in 2001. During 2002, the lowmod share of Fannie Mae's purchases of home loans increased further to 45.3 percent, placing Fannie Mae 0.1 percentage point above the market performance of 45.2 percent. Fannie Mae increased its underserved area percentage from 23.4 percent in 2000 to 24.4 in 2001 percent while the underserved area share of the primary market was falling from 26.4 percent to 25.2 percent, placing Fannie Mae at less than one percentage point from the market's performance. The "Fannie-Mae-to-market" ratio for underserved area loans was 0.97 in 2001. During 2002, the underserved area share of Fannie Mae's purchases of home loans increased further to 26.7 percent, placing Fannie Mae slightly ahead of market performance (26.4 percent).

Table A.14 reports Fannie Mae's 2001 and 2002 performance under alternative definitions of the primary market. As shown there, the above results of Fannie Mae's improvement relative to the market during 2001 and 2002 are further reinforced when lower market percentages are used.

Changes in the "Fannie-Mae-to-Freddie-Mac" Performance Ratio. The above discussion documents shifts in the relative performance of Fannie Mae and Freddie Mac over the past few years. To highlight these changing patterns, Table A.15 reports the ratio of Fannie Mae's performance to Freddie Mac's performance for each goals category for the years 1992 to 2002. As shown there, the "Fannie-Mae-to-Freddie-Mac" ratio for the special affordable category increased from approximately one in 1992 (indicating equal performance) to over 1.3 during the 1994-97 period, indicating that Fannie Mae clearly out-performed Freddie Mac during this period. Between 1997 and 2000, Freddie Mac substantially increased its special affordable share (from 9.2 percent to 14.7 percent), causing the "Fannie-Mae-to-Freddie-Mac" ratio to fall from 1.27 in 1997 to 0.90 in 2000 (indicating Freddie Mac surpassed Fannie Mae). But Fannie Mae's stronger performance during 2001 and 2002 returned the ratio to above one (1.03 in both years), indicating slightly better performance for Fannie Mae (e.g., 16.3 percent in 2002 versus 15.8 percent for Freddie Mac). The "Fannie-Mae-to-Freddie-Mac" performance ratio for low-mod loans followed a similar pattern, standing at 1.03 in 2002 (45.3 percent for Fannie Mae versus 44.0 percent for Freddie Mac).

Prior to 2000, the "Fannie-Mae-to-Freddie-Mac" ratio for underserved areas had also followed a pattern similar to that outlined above for special affordable loans, but at a lower overall level—rising from about one in 1992 (indicating equal performance) to approximately 1.2 during the 1994–97

²⁵⁹Table A.14 reports annual market percentages that exclude the effects of manufactured housing, small loans, and subprime loans. Freddie Mac's performance is closer to the market average under the alternative market definitions, particularly during 2001 and 2002.

²⁶⁰ Prior to 2002, Freddie Mac's performance on the underserved areas category had not approached the market even under the alternative market definitions reported in Table A.14.

²⁶¹ Freddie Mac, on the other hand, fell further behind the market during this period. In 1992, Freddie Mac had a slightly higher underserved areas percentage (18.6 percent) than Fannie Mae (18.3 percent). However, Freddie Mac's underserved areas percentage had only increased to 19.8 percent by 1998 (versus 22.7 percent for Fannie Mae). Thus, the "Freddie Mac-to-market" ratio fell from 0.84 in 1992 to 0.82 in 1998.

period, before dropping to slightly below one (0.98) in 1999. However, Fannie Mae increased its underserved areas percentage from 20.4 percent in 1999 to 24.4 percent in 2001 while Freddie Mac only increased its percentage from 20.9 percent to 22.3 percent. . This resulted in the "Fannie-Mae-to-Freddie-Mac" ratio rising from 0.98 in 1999 to 1.09 in 2001. But during 2002, Freddie Mac's underserved area percentage jumped by 3.5 percentage points to 25.8 percent, while Fannie Mae's increased at a more modest rate (by 2.3 percentage points) to 26.7 percent, with the result being that the "Fannie-Maeto-Freddie-Mac" ratio for underserved area loans fell from 1.09 in 2001 to 1.03 in 2002.

To conclude, while Freddie Mac ended the 1990s on a more encouraging note than Fannie Mae, the past three years (2000, 2001, and 2002) have seen a substantial improvement in Fannie Mae's performance on all three goals-qualifying categories. Fannie Mae ended the 1990s with a decline in affordable lending performance at the same time that Freddie Mac was improving and the share of goals-qualifying loans was increasing in the market. Both GSEs performance during 2000 was encouraging-Freddie Mac continued to improve, particularly with respect to the borrowerincome categories, while Fannie Mae reversed its declining performance, particularly with respect to underserved areas. During 2000, Freddie Mac outperformed Fannie Mae on the special affordable and low-mod categories, while Fannie Mae purchased a higher percentage of loans in underserved areas. During 2001, Fannie Mae continued to improve its performance while Freddie Mac's performance remained about the same and the market's originations of affordable loans

declined somewhat. The result was that during 2001 Fannie Mae outperformed Freddie Mac on all three goals-qualifying categories, and even matched the market on the low-mod category. During 2002, both Fannie Mae and Freddie Mac again improved their performance; Fannie Mae continued to outperform Freddie Mac and even matched the market on the special affordable category and slightly outperformed the market on the low-mod and underserved area categories. While Freddie Mac lagged the market on all three goals-qualifying categories during 2002, it had significantly closed its gap with the market by the end of 2002, particularly on the underserved area category.

GSE Purchases of Seasoned Loans. When the GSE data are expressed on a purchaseyear basis (as in the above analysis), one factor which affects each GSE's performance concerns their purchases of seasoned (prioryear) loans. As shown in Table A.11, Fannie Mae followed a strategy of purchasing targeted seasoned loans between 1996 and 1998, and again during the past three years all years when Fannie Mae improved its overall affordable lending performance. For example, consider Fannie Mae's underserved area performance of 24.4 percent during 2001, which was helped by its purchases of seasoned mortgages on properties located in underserved neighborhoods. The underserved area percentage for Fannie Mae's purchases of newly-originated (current-year) mortgages was only 23.3 percent in 2001, or 1.9 percentage points below the market average of 25.2 percent. Fannie Mae obtained its higher overall percentage (24.4 percent) by purchasing seasoned loans with a particularly high concentration (28.3 percent) in underserved areas. Similarly, during 2001, the special

affordable share of Fannie Mae's purchases of newly-originated mortgages was only 14.2 percent, or 1.4 percentage points below the market average of 15.6 percent. Again, Fannie Mae improved its overall performance by purchasing seasoned loans with a high percentage (18.1) of special affordable loans, enabling Fannie Mae to reduce its gap with the market to 0.7 percentage points—14.9 percent versus 15.6 percent.

As shown in Table A.11, Freddie Mac also followed a strategy of purchasing seasoned special affordable loans mainly during 2000 and 2001. Prior to 2000, Freddie Mac had not pursued such a strategy, or at least not to the same degree as Fannie Mae. During the 1997-99 period, Freddie Mac's purchases of prioryear mortgages and newly-originated mortgages had similar percentages of special affordable (and low-mod) borrowers. Over time, there have been small differentials between Freddie Mac's prior-year and newlyoriginated mortgages for the underserved areas category but they have been smaller than the differentials for Fannie Mae (see Table A.11).

d. GSEs' Annual Purchases of Home Loans— Origination-Year Basis

Table A.16 reports GSE purchase data for 1996 to 2002 on an origination-year basis. Recall that in this case, mortgages purchased by a GSE in any particular calendar year are allocated to the year that the mortgage was originated, rather than to the year that the mortgage was purchased (as in subsections C.1–C.3 above). This approach places the GSE and the market data on a consistent, current-year basis, as explained earlier.

Table A.16

Annual Trends in GSE Purchases and Single-Family Lending in Metropolitan Areas Goal-Qualifying Home Purchase Mortgages 1996-2002 GSE Data Reported on an Origination-Year Basis¹

				Conventional		
			Ratio of	Conforming Market		of GSE to
	Fannie Mae	Freddie Mac	Fannie Mae to	Originations		W/O B&C)
Borrower and Tract Characteristics	Purchases	Purchases	Freddie Mac	(W/O B&C)	Fannie Mae	Freddie Mac
Special Affordable						
1996	11.5	9.4	1.22	15.0	0.77	0.63
1997	11.2	10.0	1.12	15.2	0.74	0.66
1998	12.3	12.2	1.01	15.4	0.80	0.79
1999	13.1	14.0	0.94	17.0	0.77	0.82
2000	13.7	14.0	0.98	. 16.8	0.82	0.83
2001	14.4	13.5	1.07	15.6	0.92	0.87
2002 ²	15.8	15.8	1.00	16.3	0.97	0.97
1996-2002	13.3	12.9	1.03	16.0	0.83	0.81
1999-2002	14.3	14.3	1.00	16.4	0.87	0.87
2000-2002	14.7	14.4	1.02	16.2	0.91	0.89
Less Than Area Median Income						
1996	38.5	34.5	1.12	42.2	0.91	0.82
1997	37.9	35.7	1.06	42.5	0.89	0.84
1998	39.7	38.8	1.02	42.8	0.93	0.91
1999	41.0	42.3	0.97	44.8	0.92	0.94
2000	41.4	41.3	1.00	44.4	0.93	0.93
2001	42.3	40.6	1.04	42.9	0.99	0.95
2002 ²	45.4	44.4	1.02	45.2	1.00	0.98
1996-2002	41.2	40.0	1.03	43.6	0.94	0.92
1999-2002	42.6	42.1	1.01	44.3	0.96	0.95
2000-2002	43.1	42.1	1.02	44.2	0.98	0.95
Underserved Areas						
1996	23.3	19.6	1.19	24.9	0.94	0.79
1997	21.8	19.7	1.11	24.9	0.88	0.79
1998	21.2	20.0	1.06	24.2	0.88	0.83
1999	21.3	21.5	0.99	25.2	0.85	0.85
2000	23.4	22.2	1.05	26.4	0.89	0.84
2001	23.8	22.4	1.06	25.2	0.94	0.89
2002 ²	25.5	25.0	1.02	26.4	0.97	0.95
1996-2002	23.0	21.6	1.06	25.4	0.91	0.85
1999-2002	23.6	22.8	1.04	25.8	0.91	0.88
2000-2002	24.3	23.2	1.05	26.0	0.93	0.89

Source: See text and notes to previous tables for variable definitions and market methodology.

¹ In this table, GSE data are reported on an "origination-year" basis rather than on a "purchase-year" basis (as are the previous tables on home purchase loans). This means that prior-year loans that the GSEs purchase in a particular calendar year are allocated back to their year of origination. For example, mortgages originated in 2000 but purchased by the GSEs in 2002 would be allocated to 2000 (the year of origination). Thus, the GSE percentages for 2000 represent GSE purchases (in 2000 and in 2001 and in 2002) of mortgages originated in 2000. For this reason, the GSE data in this table are more consistent with the market data. Market percentages are for current-year mortgage originations, based on HMDA data.

² The data for 2002 represent only the GSEs' purchases during 2002 of mortgages originated during 2002, as there are not yet any subsequent years in which to report originations. Of course, during 2003 (and during following years), the GSEs will purchase subsequent years in which to report originated in 2002, which would at that time be incorporated into the data for the year 2002.

In general, the comparisons of Freddie Mac's and the market's performance are similar to those discussed in Sections E.9.a—c above, except for some differences on the special affordable category. The "Freddie Mac to market" ratios in Table A.16 show that Freddie Mac has improved its performance but has also consistently lagged the primary market in funding mortgages covered by the housing goals.

The "Fannie Mae to market" ratios in Table A.16 show that Fannie Mae has improved its performance, and has generally outperformed Freddie Mac, but has lagged the primary market in funding mortgages covered by the housing goals. Under the origination-year approach, Fannie Mae lagged the market on all three housing goal categories during 2001 and on the special affordable and underserved area categories during 2002. In 2002, low- and moderate-income loans accounted for 45.4 percent of Fannie Mae's purchases and 45.2 percent of the market originations, placing Fannie Mae 0.2 percentage points above the market.

e. GSEs' Purchases of First-Time Homebuyer Mortgages—1999 to 2001

While not a specific housing goal category, mortgages for first-time homebuyers are an important component of the overall home loan market. Making financing available for first-time homebuyers is one approach for helping young families enter the homeownership market. Therefore, this section briefly compares the GSEs' funding of first-time homebuyer loans with that of primary lenders in the conventional conforming market.

During the past few years, the GSEs have increased their purchases of first-time homebuyer loans. Fannie Mae's annual purchases of first-time homebuyer loans increased from approximately 287,000 in 1999 to 373,000 in 2002, while Freddie Mac's annual purchases increased from 199,000 to 259,000 during the same period. However, since 1999, the first-time homebuyer share of the GSEs' purchases of home loans has remained relatively flat, varying within the 25–28 percent range. However, where the GSEs' purchases of the GSEs' purchases of home loans has remained relatively flat, varying within the

Table A.17 compares the first-time homebuyer share of GSE purchases with the corresponding share of home loans originated in the conventional conforming market. Readers are referred to recent work by Bunce and Gardner 264 for the derivation of the estimates of first-time homebuyer market shares reported in Table A.17. This analysis does not include year 2002 data because market data from the American Housing Survey are not yet available for that year. Between 1999 and 2001, first-time homebuyers accounted for 26.5 percent of Fannie Mae's purchases of home loans, 26.5 percent of Freddie Mac's, and 37.6 percent of home loans originated in the conventional conforming market. Thus, both Fannie Mae and Freddie Mac fell substantially short of the primary market in financing first-time homebuyers during this time period. The GSEs' performance was only 70.5 percent of market performance (26.5 percent divided by 37.6 percent).

²⁶² These figures include estimates of first-time homebuyer loans for those home purchase loans with a missing first-time homebuyer indicator; the estimates were obtained by multiplying the GSE's first-time homebuyer share (based only on data with a first-time homebuyer indicator) by the number of loans with a missing first-time homebuyer indicator.

²⁶³ The first-time homebuyer share for Fannie Mae was almost 35 percent between 1996 and 1998; it then dropped to 30 percent in 1998 and to 26 percent in 1999. The first-time homebuyer share for Freddie Mac was approximately 29 percent in 1996

and 1997 before dropping to about 25 percent in 1998 and 1999.

²⁶⁴ See Harold L. Bunce and John L. Gardner, "First-time Homebuyers in the Conventional Conforming Market: The Role of the GSEs" (unpublished paper), January 2004.

Table A.17

First-Time Homebuyer Mortgages as a Share of All Conventional Conforming Home Purchase Mortgages, for GSEs' Purchases and Market Originations, 1999-2001 And 1996-2001 Averages

1999-2001 Averages	Fannie Mae	Freddie Mac	Both GSEs	Conventional Conforming Market
All First-Time Homebuyers	26.5% ¹	26.5%	26.5%	37.6% ³
African-American and Hispanic First-Time Homebuyers	4.0%	3.4%	3.8%	6.9%
Minority First-Time Homebuyers	6.6% ²	5.8%	6.2%	10.6%4
1996-2001 Averages				
All First-Time Homebuyers	29.3%	26.9%	28.3%	38.4%
African-American and Hispanic First-Time Homebuyers	4.3%	3.1%	3.8%	6.8%
Minority First-Time Homebuyers	6.9%	5.3%	6.3%	10.2%

Notes: These data cover the entire U.S. (i.e., both metropolitan and non-metropolitan areas).

The first-time homebuyer concept for the market analysis is homebuyers who have never owned a home. The concept for the GSEs is purchasers who have not owned a home within the past three years. The market analysis is based on GSE, HMDA, and American Housing Survey data. See Bunce and Gardner (2004) for the methodology for estimating the market first-time homebuyer percentages. Because the percentages for the GSEs include seasoned loans and the market ratios include only current-year mortgage originations, the GSE ratios tend to overstate the GSEs' business shares in each category, compared to mortgage origination activity in a given year.

Interpretations:

- ¹ First-time homebuyer mortgages were 26.5% of all home purchase mortgages purchased by Fannie Mae in 1999-2001.
- ² Minority first-time homebuyer mortgages were 6.6% of all home purchase mortgages purchased by Fannie Mae in 1999-2001.
- ³ First-time homebuyer mortgages were 37.6% of all home purchase mortgage originations in the conventional conforming market during 1999-2001.
- ⁴ Minority first-time homebuyer mortgages were 10.6% of all home purchase mortgage origintions in the conventional conforming market during 1999-2001.

Table A.17 also reports first-time homebuyer shares for African Americans and Hispanics and for all minorities. Between 1999 and 2001, African-American and Hispanic first-time homebuyers accounted for 4.0 percent of Fannie Mae's purchases of home loans, 3.4 percent of Freddie Mac's purchases, and 6.9 percent of home loans originated in the conventional conforming market. For this subgroup, Fannie Mae's performance is 58 percent of market performance, while Freddie Mac's performance is 49 percent of market performance. The group of all minority firsttime homebuyers accounted for 6.6 percent of Fannie Mae's purchases of home loans, 5.8 percent of Freddie Mac's purchases, and 10.6 percent of home loans originated in the conventional conforming market. In this case, Fannie Mae's performance is 62 percent of market performance, while Freddie Mac's performance is 55 percent of market performance.

Section E.12 below will continue this examination of first-time homebuyers by presenting market share analysis that estimates the GSEs' overall importance in the funding of first-time homebuyers.

f. Low- and Moderate-Income Subgoal for Home Purchase Loans

The Department is proposing to establishing a subgoal of 45 percent for each GSE's purchases of home purchase loans for low- and moderate-income families in the single-family-owner market of metropolitan areas for 2005, with the proposed subgoal rising to 46 percent for 2006 and 47 percent for 2007 and 2008. If the GSEs meet this subgoal, they will be leading the primary market by approximately one percentage point in 2005 and by three percentage points in 2007-08, based on historical data (see below). This home purchase subgoal will encourage the GSEs to expand homeownership opportunities for lowerincome homebuyers who are expected to enter the housing market over the next few years. As detailed in Section I, there are four specific reasons for establishing this subgoal: (1) The GSEs have the expertise, resources, and ability to lead the single-family-owner market, which is their "bread and butter" business; (2) the GSEs have historically lagged the primary market for low- and moderate-income loans, not lead it; (3) the GSEs can improve their funding of first-time homebuyers and help reduce troublesome disparities in homeownership and access to mortgage credit; and (4) there are ample opportunities for the GSEs to expand their purchases in important and growing market segments such as the market for minority first-time homebuyers. Sections E.9 and G of this appendix provide additional information on opportunities for an enhanced GSE role in the home purchase market and on the ability of the GSEs to lead that market.

As shown in Tables A.13 and A.15, lowand moderate-income families accounted for an average of 44.3 percent of home purchase loans originated in the conventional

conforming market of metropolitan areas between 1999 and 2002; the figure is 43.6 percent if the average is computed for the vears between 1996 and 2002. Loans in the B&C portion of the subprime market are excluded from these market averages. To reach the proposed 45-percent subgoal for 2005, both GSEs would have to improve their historical performance—Fannie Mae by 0.8 percentage points over its average performance of 44.2 percent in 2001 and 2002, and Freddie by 2.4 percentage points over its average performance of 42.6 percent during the same period. To reach the 47 percent subgoal in 2007-08, each GSE's performance would have to increase by an additional two percentage points.

As explained earlier, HUD will be rebenchmarking its median incomes for metropolitan areas and non-metropolitan counties based on 2000 Census median incomes, and will be incorporating the effects of the new OMB metropolitan area definitions. As explained in Appendix D, HUD projected the effects of these two changes on the low- and moderate-income shares of the single-family-owner market for the years 1999-2002. These estimates will be referred to as "projected data" while the 1990-based data reported in the various tables will be referred to as "historical data." With the historical data, the average low-mod share of the conventional conforming market (without B&C loans) was 44.3 percent for home purchase loans (weighted average of 1999-2002 percentages in Table A.13); the corresponding average with the projected data was 43.1 percent, a differential of 1.2 percentage points. The projected low-mod percentages for each year between 1999 and 2002 were as follows (with the historical percentages from Table A.15 in parentheses): 44.0 (44.8) percent for 1999; 43.7 (43.7) percent for 2000; 41.6 (42.9) percent for 2001; and 43.1 (45.2) percent for 2002. The differentials between the projected and historical data are larger in 2001 (1.3 percentage points) and 2002 (2.1 percentage points) than in 1999 (0.8 percentage point) and 2000 (0.7 percentage point). It appears that the low-mod share for single-familyowners in the conventional conforming market will be at least one percentage point less due to the re-benchmarking of area median incomes and the new OMB definitions of metropolitan areas. Thus, based on projected data, the 45-percent (47 percent) subgoal for 2005 (2007) is approximately two (four) percentage points above the 1999-2002 market average.

The estimated low-mod percentages between 1999 and 2002 for Fannie Mae were as follows (with the historical percentages from Table A.15 in parentheses): 39.2 (40.0) percent for 1999; 40.1 (40.8) percent for 2000; 41.7 (42.9) percent for 2001; and 43.6 (45.3) percent for 2002; Fannie Mae's average low-mod performance between 1999 and 2002 based on the projected data was 41.4 percent, compared with 42.5 percent based on historical data. To reach the 45-percent subgoal (47 percent) subgoal for 2005 (2007)

based on projected data, Fannie Mae would have to improve its performance by 2.3 (4.3) percentage points over its estimated average performance of 42.7 percent in 2001 and 2002, or by 1.4 (3.4) percentage points over its estimated 2002 low-mod performance of 43.6 percent.

The estimated low-mod percentages between 1999 and 2002 for Freddie Mac were as follows (with the historical percentages from Table A.15 in parentheses): 40.0 (40.8) percent for 1999; 41.7 (42.7) percent for 2000; 39.8 (41.3) percent for 2001; and 42.1 (44.0) percent for 2002; Freddie Mac's average lowmod performance between 1999 and 2002 based on the projected data was 40.9 percent, compared with 42.3 percent based on historical data. To reach the 45-percent subgoal based on projected data, Freddie Mac would have to improve its performance by 4.0 percentage points over its projected average performance of 41.0 percent in 2001 and 2002, or by 2.9 percentage points over its projected 2002 low-mod performance of 42.1 percent.

The subgoal applies only to the GSEs' purchases in metropolitan areas because the HMDA-based market benchmark is only available for metropolitan areas. HMDA data for non-metropolitan areas are not reliable enough to serve as a market benchmark. The Department is also setting home purchase subgoals for the other two goals-qualifying categories, as explained in Appendices B and C.

10. GSEs Purchases of Total (Home Purchase and Refinance) Loans

Section E.9 examined the GSEs' acquisitions of home purchase loans, which is appropriate given the importance of the GSEs for expanding homeownership opportunities. To provide a complete picture of the GSEs' mortgage purchases in metropolitan areas, Tables A.18, A.19, A.20, and A.21 report the GSEs' purchases of all single-family-owner mortgages, including both home purchase loans and refinance loans 285

Table A.18 provides a long-run perspective on the GSEs' overall performance. Between 1993 and 2002, as well as during the 1996-2002 period, each GSE's performance was 80-86 percent of market performance for the special affordable category, 91-95 percent of market performance for the low-mod category, and 88-92 percent of market performance for the underserved areas category. For example, between 1996 and 2002, underserved areas accounted for 23.2 percent of Fannie Mae's purchases and 22.4 percent of Freddie Mac's purchases, compared with 25.5 percent for the conventional conforming market (without B&C loans). Similarly, for special affordable loans, both GSEs lagged the market during the 1996-2002 period-Fannie Mae and Freddie Mac averaged approximately 13.0 percent while the market was over two percentage points higher at 15.2 percent. BILLING CODE 4210-27-P

 $^{^{265}}$ The GSE total (home purchase and refinance) data in Tables A.18–A.20 are presented on a

purchase-year basis; Table A.21 presents similar data on an origination-year basis.

Table A.18

GSE Purchases and Single-Family Lending in Metropolitan Areas Goal-Qualifying Home Purchase and Refinance Mortgages, 1993-2002

Ratio of GSE to Market (W/O B&C)	Freddie Mac	0.80	0.63	0.84	0.88	16:0		16.0	0.84	0.92	0.94	0.95		0.88	0.88	0.88	0.00	0.91
Ratio of GSE to	Fannie Mae	0.83	0.73	98.0	0.88	0.93		0.94	0.90	0.95	96.0	0.98		0.92	0.94	0.91	0.93	96.0
forming Market (W/O	B&C Loans)	14.4 %	11.4	15.2	15.7	15.3		41.3 %	36.8	42.6	43.3	42.9		25.0 %	23.2	25.5	25.7	25.4
Conventional Conforming Market (W/O	Total	% 0 % 1	11.6	15.9	16.3	15.8		42.1 %	37.0	43.5	44.2	43.7		25.9 %	23.5	26.5	26.7	26.3
Ratio of Fannie Mae to	Freddie Mac	1 03	1.15	1.02	1.00	1.02		1.03	1.06	1.02	1.01	1.03		1.05	1.08	1.04	1.03	1.05
	Freddie Mac	11 5 %	7.2	12.7	13.8	13.9		37.5 %	31.0	39.4	40.9	40.8		21.9 %	20.3	22.4	23.1	23.1
	Fannie Mae	119 %	8.3	13.0	13.8	14.2		38.7 %	33.0	40.3	41.5	42.1		22.9 %	21.9	23.2	23.8	24.3
	Borrower and Tract Characteristics	Special Affordable	1993-1995	1996-2002	1999-2002	2000-2002	Less than Area Median Income	1993-2002	1993-1995	1996-2002	1999-2002	2000-2002	Underserved Areas	1993-2002	1993-1995	1996-2002	1999-2002	2000-2002

Source: The Fannie Mae and Freddie Mac data include information on all their single-family-owner mortgage purchases from the loan-level data that they provide to HUD. adjacent "Total" market column (see text for explanation). Special affordable includes very low-income borrowers and low-income borrowers in low-income census tracts. excluded from the borrower income calculations. The numbers in the "W/O B&C Loans" column are the average market percentages after deducting B&C loans from the All mortgages are conventional conforming mortgages. "Conventional Conforming Market" data are from HMDA; loans with a loan-to-income ratio greater than six are Data with missing values are excluded. Similar to the patterns discussed for home purchase loans, Fannie Mae has tended to outperform Freddie Mac. This can be seen by examining the various "Fannie-Mae-to-Freddie-Mac" ratios in Table A.18, which are all equal to or greater than one. Over the recent 1999–2002 period, Fannie Mae and Freddie Mac continued to lag the overall market on all three goals-qualifying categories. Special affordable (underserved area) loans averaged 13.8 (23.8) percent of Fannie Mae's purchases, 13.8 (23.1) percent of Freddie Mac's purchases, and 15.7 (25.7) percent of market originations. Considering both GSEs, the market ratio was 0.88 for

special affordable loans, approximately 0.95 for low-mod loans, and slightly over 0.90 for underserved area loans. As with home purchase loans, dropping the year 1999 and characterizing recent performance by the 2000–2002 period improves the performance of both GSEs relative to the market, but particularly Fannie Mae. Over the 2000–2002 period, the "Fannie-Mae-to-market" ratio was 0.93 for Special Affordable loans, 0.98 for low-mod loans, and 0.96 for underserved area loans.

The above analysis has defined the market to exclude B&C loans. Table A.19 shows the effects on the market percentages of different definitions of the conventional conforming market. For example, the average 1999–2002 market share for special affordable (underserved areas) loans would fall to 15.1 (25.3) percent if manufactured housing loans in metropolitan areas were excluded from the market definition along with B&C loans. In this case, the market ratio for Fannie Mae (Freddie Mac) would be was 0.91 (0.91) for special affordable loans, 0.97 (0.96) for low-mod loans, and 0.94 (0.91) for underserved area loans.

Table A.19

Annual Trends in GSE Purchases and Single-Family Lending in Metropolitan Areas Goal-Qualifying Home Purchase and Refinance Mortgages, 1996-2002 Various Market Definitions

					Conventional	Conventional Conforming Market Originations	rket Origination	SI	
				W/O Mfg	W/O		W/O B&C		W/O B&C
: :	Fannie Mae	Freddie Mac	Total	and Less Than	Subprime	W/O B&C	and Mfg	and LT \$15K	Mfg, and
Special Affordable	Furchases	Purchases	Market	SISK Loans	Loans	Loans	Loans	roans	L1 313R
9661	10.5	9.4	15.3	13.7	14.4	14.8	13.7	14.1	13.2
1997	11.5	10.1	16.4	14.8	14.8	15.6	14.5	15.0	14.0
1998	11.1	11.0	14.2	13.2	12.6	13.5	12.7	13.1	12.4
6661	12.4	13.4	18.3	17.0	191	17.3	16.2	16.9	15.9
2000	14.5	191	19.3	18.0	17.1	18.3	17.3	17.7	16.9
2001	13.9	13.3	15.0	14.4	13.9	14.5	14.1	14.2	13.9
2002	14.3	13.6	15.1	14.8	14.2	14.6	14.5	14.5	14.4
1996-2002	13.0	12.7	15.9	15.0	14.4	15.2	14.5	14.8	14.2
1999-2002	13.8	13.8	16.3	15.6	14.9	15.7	15.1	15.3	14.9
2000-2002	14.2	13.9	15.8	15.3	14.6	15.3	14.8	15.0	14.6
Less Than Area Median Income									
9661	37.0	34.8	42.4	40.4	41.4	41.9	40.5	41.2	39.8
1997	38.0	36.1	43.7	41.8	41.9	42.9	41.4	42.2	40.8
1998	37.4	36.7	40.9	39.6	38.9	39.9	38.9	39.5	38.6
6661	39.3	41.2	46.3	44.7	43.7	45.1	43.8	44.6	43.4
2000	42.3	44.3	47.4	45.9	44.9	46.3	45.1	45.6	44.6
2001	41.7	40.2	42.3	41.6	40.9	41.6	41.2	41.3	40.9
2002	42.2	40.1	43.2	42.9	41.9	42.6	42.4	42.4	42.2
1996-2002	40.3	39.4	43.5	42.3	41.7	42.6	41.8	42.2	41.4
1999-2002	41.5	40.9	44.2	43.3	42.4	43.3	42.7	43.0	42.4
2000-2002	42.1	40.8	43.7	42.9	42.1	42.9	42.5	42.6	42.1
Underserved Areas									
1996	22.9	20.7	26.7	25.3	25.3	26.0	25.0	25.6	24.6
1661	23.3	21.4	27.8	26.6	25.5	26.7	25.7	26.3	25.3
1998	21.1	20.8	24.8	23.9	22.4	23.6	23.0	23.4	22.7
1999	21.7	23.3	28.2	27.3	25.4	26.9	26.1	26.7	25.9
2000	25.2	24.6	30.3	29.4	27.3	28.9	28.2	28.6	27.9
2001	24.2	22.5	25.7	25.3	23.9	24.9	24.6	24.7	24.4
2002	24.0	22.9	25.2	25.0	23.4	24.3	24.2	24.2	24.1
1996-2002	23.2	22.4	26.5	25.8	24.3	25.5	24.9	25.2	24.7
1999-2002	23.8	23.1	26.7	26.2	24.5	25.7	25.3	25.5	25.1
2000-2002	24.3	23.1	26.3	25.9	24.3	25.4	25.1	25.2	24.9

Source: The Fannie Mae and Freddie Mac percentages are based on the Joan-level data that they provide to HUD. All mortgages are conventional conforming home purchase and refinance mortgages. The Conventional Conforming Market data are from HMDA: loans with a loan-to-income-ratio greater than six are excluded from all borrower income calculations. See the text for an explanation of the adjustments for manufactured housing (Mfg.), subprime, and B&C loans. Special affordable includes very low-income borrowers and low-income borrowers living in low-income census tracts. Data with missing values are excluded.

Shifts in performance occurred during 2001 and 2002, the first two years under HUD's higher housing goal targets. Table A.20 shows that both GSEs improved their overall performance between 1999 and 2000, but they each fell back a little during the heavy refinancing year of 2001. But the primary market (without B&C loans) experienced a much larger decline in

affordable lending during the refinancing wave than did either of the GSEs. Fannie Mae stood out in 2001 because of its particularly small decline in affordable lending. Between 2000 and 2001, Fannie Mae's special affordable lending fell by only 0.6 percentage points while Freddie Mac's fell by 2.8 percentage points and the market's fell by 3.8 percentage points. The corresponding

percentage point declines for the underserved areas category were 1.0 for Fannie Mae, 1.9 for Freddie Mac, and 4.0 for the market. By the end of 2001, Fannie Mae led Freddie Mac in all three goals-qualifying categories, and had erased its gap with the low-mod market, but continued to lag the market on the special affordable and underserved areas categories.

Table A.20

Annual Trends in GSE Purchases and Single-Family Lending in Metropolitan Areas Goal-Qualifying Home Purchase and Refinance Mortgages, 1997-2002

				Conventional		
			Ratio of	Conforming Market		
	Fannie Mae	Freddie Mac	Fannie Mae to	Originations	Ratio of GSE to Market (W/O B&C)	arket (W/O B&C)
Borrower and Tract Characteristics	Purchases	Purchases	Freddie Mac	(W/O B&C)	Fannie Mae	Freddie Mac
Special Affordable Borrower						
1997	11.5	10.1	1.14	15.6	0.74	0.65
1998	11.1	11.0	1.01	13.5	0.82	0.81
1999	12.4	13.4	0.93	17.3	0.72	0.77
2000	14.5	16.1	06:0	18.3	0.79	0.88
2001	13.9	13.3	1.05	14.5	96:0	0.92
2002	14.3	13.6	1.05	14.6	86.0	0.93
Less Than Area Median Income Borrower						
1997	38.0	36.1	1.05	42.9	0.89	0.84
1998	37.4	36.7	1.02	39.9	0.94	0.92
1999	39.3	41.2	0.95	45.1	0.87	0.91
2000	42.3	44.3	0.95	46.3	0.91	96:0
2001	41.7	40.2	1.04	41.6	1.00	0.97
2002	42.2	40.1	1.05	42.6	0.99	0.94
Underserved Areas						
1997	23.3	21.4	1.09	26.7	0.87	08.0
1998	21.1	20.8	1.01	23.6	0.89	0.88
1999	21.7	23.3	0.93	26.9	0.81	0.87
2000	25.2	24.6	1.02	28.9	0.87	0.85
2001	24.2	22.5	1.08	24.9	0.97	06.0
2002	24.0	22.9	1.05	24.3	66:0	0.94

is defined as income less than or equal to 60 (80) percent of area median income. An underserved area is defined as a census tract with median income at or below 90 percent of the area median income; or a census tract with median income at or below 120 percent of the median inocme areas and a minority population of 30 Source: Special affordable includes very low-income borrowers plus low-income borrowers living in low-income census tracts. Very low-income (low-income) percent or greater. Data with missing values are excluded.

During the refinancing wave of 2002, Fannie Mae improved slightly on the special affordable and low-mod categories and declined slightly on the underserved area category. Freddie Mac showed slight improvement on the special affordable and underserved area categories and remained about the same on the low-mod category. The market showed the same pattern as Fannie Mae. The end result of these changes can be seen by considering the market ratios in Table A.20. In 2002, special affordable loans accounted for 14.3 percent of Fannie Mae's purchases and 14.6 percent of loans originated in the non-B&C portion of the conventional conforming market, yielding a "Fannie-Mae-to-market" ratio of 0.98. Since Fannie Mae's market ratio for the special affordable category stood at 0.79 in 2000, Fannie Mae substantially closed its gap with the market during 2001 and 2002. During this period, Fannie Mae also mostly eliminated its market gap for the other two goalsqualifying categories. In 2002, underserved area loans accounted for 24.0 percent of Fannie Mae's purchases and 24.3 percent of loans originated in the non-B&C portion of the conventional conforming market, yielding a "Fannie-Mae-to-market" ratio of 0.99, or approximately one. During 2002, low-mod loans accounted for 42.2 percent of Fannie Mae's purchases and 42.6 percent of loans originated in the market, yielding a "Fannie-Mae-to-market" ratio of 0.99, or approximately one (also note that Fannie Mae slightly outperformed the low-mod market during 2001). Thus, while Fannie Mae continued to lag the market in 2002 on each of the three goals-qualifying categories, it was close to the market on the low-mod

and underserved area categories, in particular.

Freddie Mac significantly lagged the single-family (home purchase and refinance loans combined) market during 2001 and 2002. In 2002, the "Freddie-Mac-to-market" ratios were 0.93 for special affordable loans, 0.94 for low-mod loans, and 0.94 for underserved area loans.

Subprime Loans. Table A.14 in Section E.9 showed that the goals-qualifying shares of the home purchase market did not change much when originations by subprime lenders are excluded from the analysis; the reason is that subprime lenders operate primarily in the refinance market. Therefore, in this section's analysis of the total market (including refinance loans), one would expect the treatment of subprime lenders to significantly affect the market estimates and, indeed, this is the case. For the year 2001, excluding subprime loans reduced the goal-qualifying shares of the total market as follows: special affordable, from 15.0 to 13.9 percent; lowmod, from 42.3 to 40.9 percent; and underserved areas, from 25.7 to 23.9 percent. (See Table A.19.) Similar declines take place in 2002.

As explained earlier, the comparisons in this appendix have defined the market to exclude the B&C portion of the subprime market. Industry observers estimate that Aminus loans account for about two-thirds of all subprime loans while the more risky B&C loans account for the remaining one-third. As explained earlier, this analysis reduces the goal-qualifying percentages from the HMDA data by half the differentials between (a) the market (unadjusted) and (b) the market without the specialized subprime lenders identified by Scheessele. As shown in Table

A.19, accounting for B&C loans in this manner reduces the year 2001 HMDAreported goal-qualifying shares of the total (home purchase and refinance) conforming market as follows: special affordable, from 15.0 to 14.5 percent; low-mod, from 42.3 to 41.6 percent; and underserved areas, from 25.7 to 24.9 percent. Obviously, the GSEs performance relative to the market will depend on which market definition is used (much as it did with the earlier examples of excluding manufactured housing loans in metropolitan areas from the market definition). For example, defining the conventional conforming market to exclude subprime loans, rather than only B&C loans, would increase Fannie Mae's 2002 special affordable (underserved area) market ratio from 0.98 to 1.01 (0.99 to 1.03). Similarly, it would increase Freddie Mac's special affordable (underserved area) market ratio from 0.93 to 0.96 (0.94 to 0.98). For the broader-defined low-mod category, redefining the market to exclude subprime loans, rather than only B&C loans, would increase Fannie Mae's (Freddie Mac's) market ratio from 0.99 to 1.01 (0.94 to 0.96).

Table A.21 reports GSE purchase data for total (home purchase and refinance) loans on an origination-year basis. The "Freddie Macto-market" ratios in Table A.21 show that Freddie Mac has lagged the primary market in funding mortgages covered by the housing goals. The "Fannie Mae-to-market" ratios in Table A.21 show that except for the low-mod category in 2002 Fannie Mae has lagged the primary market in funding home purchase and refinance mortgages covered by the housing goals.

Table A.21

Annual Trends in GSE Purchases and Single-Family Lending in Metropolitan Areas Goal-Qualifying Home Purchase and Refinanace Mortgages 1996-2002 GSE Data Reported on an Origination-Year Basis1

	Fannie Mae	Freddie Mac	Ratio of Fannie Mae to	Conventional Conforming Market Originations		f GSE to W/O B&C)
Borrower and Tract Characteristics	Purchases	Purchases	Freddie Mac	(W/O B&C)	Fannie Mae	Freddie Mac
Special Affordable						
1996	11.4	9.9	1.15	14.8	0.77	0.67
1997	11.1	10.7	1.04	15.6	0.71	0.69
1998	10.7	11.4	0.94	13.5	0.79	0.84
1999	13.9	15.0	0.93	17.3	0.80	0.87
2000	14.8	15.9	0.93	18.3	0.81	0.87
2001	13.4	12.7	1.06	14.5	0.92	0.88
2002 ²	14.4	13.5	1.07	14.6	0.99	0.92
1996-2002	13.0	12.8	1.02	15.2	0.86	0.84
1999-2002	14.0	13.8	1.01	15.7	0.89	0.88
2000-2002	14.0	13.6	1.03	15.3	0.92	0.89
Less Than Area Median Income						
1996	38.2	35.6	1.07	41.9	0.91	0.85
1997	37.6	36.7	1.02	42.9	0.88	0.86
1998	36.7	37.3	0.98	39.9	0.92	0.93
1999	41.5	43.3	0.96	45.1	0.92	0.96
2000	42.8	43.8	0.98	46.3	0.92	0.95
2001	41.1	39.3	1.05	41.6	0.99	0.94
2002 ²	42.8	40.3	1.06	42.6	1.00	0.95
1996-2002	40.4	39.5	1.02	42.6	0.95	0.93
1999-2002	42.0	41.0	1.02	43.3	0.97	0.95
2000-2002	42.1	40.4	1.04	42.9	0.98	0.94
Underserved Areas						
1996	23.7	21.0	1.13	26.0	0.91	0.81
1997	22.1	21.5	1.03	26.7	0.83	0.81
1998	20.5	21.2	0.97	23.6	0.87	0.90
1999	22.8	24.3	0.94	26 9	0.85	0.90
2000	25.4	25.2	1.01	28 9	0.88	0.87
2001	23.6	22.4	1.05	24 9	0.95	0.90
2002 ²	23.7	22.3	1.06	24.3	0.98	0.92
1996-2002	23.0	22.4	1.03	25.5	0.90	0.88
1999-2002	23.7	23.1	1.03	25.7	0.92	0.90
2000-2002	23.9	22.8	1.05	25.4	0.94	0.90

Source: See text and notes to previous tables for variable definitions and market methodology.

In this table, GSE data are reported on an "origination-year" basis rather than on a "purchase-year" basis (as are the previous tables on home purchase and refinance loans). This means that prior-year loans that the GSEs purchase in a particular calendar year are allocated back to their year of origination. For example, mortgages originated in 2000 but purchased by the GSEs in 2002 would be allocated to 2000 (the year of origination). Thus, the GSE percentages for 2000 represent GSE purchases (in 2000 and in 2001 and in 2002) of mortgages originated in 2000. For this reason, the GSE data in this table are more consistent with the market data. Market percentages are for current-year mortgage originations, based on HMDA data.

² The data for 2002 represent only the GSEs' purchases during 2002 of mortgages originated during 2002, as there are not yet any subsequent years in which to report originations to report. Of course, during 2003 (and during following years), the GSEs will purchase prior-year loans originated in 2002, which would at that time be incorporated into the data for the year 2002.

11. GSE Mortgage Purchases in Individual Metropolitan Areas

While the above analyses, as well as earlier studies, concentrate on national-level data, it is also instructive to compare the GSEs' purchases of mortgages in individual metropolitan areas (MSAs). In this section, the GSEs' purchases of single-family owneroccupied home purchase loans are compared to the market in individual MSAs. There are three steps. First, goals-qualifying percentages for conventional conforming mortgage originations (without B&C loans) are computed for each year and for each MSA, based on HMDA data. Second, corresponding goals-qualifying percentages are computed for each GSE's purchases for each year and for each MSA. These two sets

of percentages are the same as those used in the aggregate analysis discussed in the above sections. *Third*, the "GSE-to-market" ratio is then calculated by dividing each GSE percentage by the corresponding market percentage. For example, if it is calculated that one of the GSEs' purchases of low- and moderate-income loans in a particular MSA is 40 percent of their overall purchases in that MSA, while 44 percent of all home loans (excluding B&C loans) in that MSA qualify as low-mod, then the GSE-to-market ratio is 40/44 (or 0.91). The goals-qualifying ratios for Fannie Mae and Freddie Mac can be compared for each MSA in a similar manner.

Tables A.22, A.23, and A.24 summarize the performance of the GSEs within MSAs for 2000, 2001 and 2002 originations of home

purchase loans. A GSE's performance is determined to be lagging the market if the ratio of the GSE housing goal loan purchases to their overall purchases is less than 99 percent of that same ratio for the market. (The analysis was conducted where the "lag" determination is made at 98 percent instead of 99 percent and the results showed little change.) In the example given in the above paragraph, that GSE would be considered lagging the market. Tables A.22 (2000), A.13 (2001) and A.24 report the number of MSAs in which each GSE under-performs the market with respect to each of the three housing goal categories. The following points can be made from this data:

Table A.22

Analysis of GSEs' Purchases Across MSAs by Housing Goal Category 2000 Originations

	Underserved Areas	Areas	Low-Mod Income	come	Special Affordable	rdable
Number of MSAs Analyzed	331	100.0%	331	100.0%	331	100.0%
Fannie Mae Lags the Market	296	89.4%	269	81.3%	299	90.3%
Freddie Mac Lags the Market	292	88.2%	282	85.2%	299	90.3%
Fannie Mae Lags Freddie Mac	158	47.7%	126	38.1%	153	46.2%
Freddie Mac Lags Fannie Mae	153	46.2%	190	57.4%	168	50.8%

Source: Fannie Mae and Freddie Mac data are from the loan-level data they provide to HUD. The market data are conforming originations as reported in HMDA data.

metropolitan areas (as defined by OMB in 2000) purchased by the GSEs between 2000 and 2002 for loans originated in 2000. Loans with Notes: The GSE loans in this analysis include all single-family owner-occupied conventional conforming home purchase mortgages in a loan-to-income ratio greater than six are excluded from Low-Mod Income and Special Affordable analyses

or special affordable defined as very low-income occupant or low-income occupant in low-income area) if the ratio of the share of category In general, a GSE is determined to lag the market (or lag the other GSE) for a category (i.e., underserved area, low- and moderate-income, loans in that GSE's purchases to the share of category loans in market originations (or in the other GSE's purchases) is less than 99%. Exceptions to this procedure are as follows:

If, for loans in a category in an MSA, there are fewer than 5 loans reported in the HMDA data and fewer than 5 loans purchased by each of the GSEs, that MSA is excluded from the analysis for that category. If, for loans in a category in an MSA, there are fewer than 5 loans reported in the HMDA data and fewer than 5 loans purchased by one of the GSEs, that GSE is counted as not lagging the market in that MSA for that category regardless of the calculated ratio. If, for loans in a category in an MSA, there are 5 or more loans reported in the HMDA data and fewer than 5 loans purchased by each of the GSEs, then neither GSE is counted as lagging the other GSE in that MSA for that category regardless of the calculated ratio

Table A.23

Analysis of GSEs' Purchases Across MSAs by Housing Goal Category 2001 Originations

	Underserved Areas	Areas	Low-Mod Income	come	Special Affordable	rdable
Number of MSAs Analyzed	331	100.0%	331	100.0%	331	100.0%
Fannie Mae Lags the Market	267	80.7%	202	%0.19	261	78.9%
Freddie Mac Lags the Market	260	78.5%	275	83.1%	279	84.3%
Fannie Mae Lags Freddie Mac	166	50.2%	83	25.1%	117	35.3%
Freddie Mac Lags Fannie Mae	147	44.4%	223	67.4%	201	%2'09

Source: Fannie Mae and Freddie Mac data are from the loan-level data they provide to HUD. The market data are conforming originations as reported in HMDA data.

metropolitan areas (as defined by OMB in 2001) purchased by the GSEs between 2001 and 2002 for loans originated in 2001. Loans with Notes: The GSE loans in this analysis include all single-family owner-occupied conventional conforming home purchase mortgages in a loan-to-income ratio greater than six are excluded from Low-Mod Income and Special Affordable analyses.

or special affordable defined as very low-income occupant or low-income occupant in low-income area) if the ratio of the share of category In general, a GSE is determined to lag the market (or lag the other GSE) for a category (i.e., underserved area, low- and moderate-income, loans in that GSE's purchases to the share of category loans in market originations (or in the other GSE's purchases) is less than 99%. Exceptions to this procedure are as follows:

If, for loans in a category in an MSA, there are fewer than 5 loans reported in the HMDA data and fewer than 5 loans purchased by each of the GSEs, that MSA is excluded from the analysis for that category If, for loans in a category in an MSA, there are fewer than 5 loans reported in the HMDA data and fewer than 5 loans purchased by one of the GSEs, that GSE is counted as not lagging the market in that MSA for that category regardless of the calculated ratio. If, for loans in a category in an MSA, there are 5 or more loans reported in the HMDA data and fewer than 5 loans purchased by each of the GSEs, then neither GSE is counted as lagging the other GSE in that MSA for that category regardless of the calculated ratio.

Table A.24

Analysis of GSEs' Purchases Across MSAs by Housing Goal Category 2002 Originations

	Underserved Areas	Areas	Low-Mod Income	come	Special Affordable	rdable
Number of MSAs Analyzed	331	100.0%	331	100.0%	331	100.0%
Fannie Mae Lags the Market	248	74.9%	133	40.2%	204	61.6%
Freddie Mac Lags the Market	193	58.3%	234	70.7%	235	71.0%
Fannie Mae Lags Freddie Mac	203	61.3%	73	22.1%	121	39.9%
Freddie Mac Lags Fannie Mae	116	35.0%	237	71.6%	961	59.2%

Source: Fannie Mae and Freddie Mac data are from the loan-level data they provide to HUD. The market data are conforming originations as reported in HMDA data.

Notes: The GSE loans in this analysis include all single-family owner-occupied conventional conforming home purchase mortgages metropolitan areas (as defined by OMB in 2002) purchased by the GSEs in 2002 for loans originated in 2002. Loans with a loan-to-income ratio greater than six are excluded from Low-Mod Income and Special Affordable analyses.

or special affordable defined as very low-income occupant or low-income occupant in low-income area) if the ratio of the share of category In general, a GSE is determined to lag the market (or lag the other GSE) for a category (i.e., underserved area, low- and moderate-income, loans in that GSE's purchases to the share of category loans in market originations (or in the other GSE's purchases) is less than 99%. Exceptions to this procedure are as follows:

If, for loans in a category in an MSA, there are fewer than 5 loans reported in the HMDA data and fewer than 5 loans purchased by each of the GSEs, that MSA is excluded from the analysis for that category If, for loans in a category in an MSA, there are fewer than 5 loans reported in the HMDA data and fewer than 5 loans purchased by one of the GSEs, that GSE is counted as not lagging the market in that MSA for that category regardless of the calculated ratio. If, for loans in a category in an MSA, there are 5 or more loans reported in the HMDA data and fewer than 5 loans purchased by each of the GSEs, then neither GSE is counted as lagging the other GSE in that MSA for that category regardless of the calculated ratio. Fannie Mae's improvement between 2000 and 2002 shows up clearly in these tables. In 2000, Fannie Mae lagged the market in 296 (89 percent) of the 331 MSAs in the purchase of underserved area loans; this number decreased to 267 (81 percent) MSAs in 2001 and to 248 (75 percent) MSAs in 2002. Fannie Mae's improvement was even greater for special affordable and low-mod loans; in the latter case, Fannie Mae lagged the market in 133 (40 percent) MSAs in 2002, compared with 269 (81 percent) MSAs in 2000.

Freddie Mac's improvement between 2000 and 2002 was greater for underserved area loans. In 2000, Freddie Mac lagged the market in 292 (88 percent) of the 331 MSAs in the purchase of underserved area loans; this number decreased to 260 (79 percent) MSAs in 2001 and to 193 (58 percent) MSAs in 2002. Freddie Macs made less improvement on the special affordable and low-mod categories; in the former case, Freddie Mac lagged the market in 234 (71 percent) MSAs in 2002, compared with 282 (85 percent) MSAs in 2000.

Freddie Mac outperformed Fannie Mae during 2002 in 65 percent of the MSAs, even though Freddie Mac's average national performance was below Fannie Mae's in that year (see Table A.16 in Section E.9.d); this suggests that Freddie Mac performs better in small MSAs, as compared with Fannie Mae. This is also consistent with the fact that Fannie Mae lagged the market in 75 percent of the MSAs during 2002, even though its average national performance was only slightly below market performance (see Table A.16); this suggests Fannie Mae does better in large MSAs, as compared with small MSAs.

In its comments on the 2000 Proposed Rule, Fannie Mae raised several concerns about HUD's comparisons between Fannie Mae and the primary market at the metropolitan statistical area level. Essentially, Fannie Mae questioned the relevance of any analysis at the local level, given that the housing goals are nationallevel goals. HUD believes that its metropolitan-area analyses support and clarify the national analyses on GSE performance. While official goal performance is measured only at the national level, HUD believes that analyses of, for example, the numbers of MSAs where Fannie Mae and Freddie Mac lead or lag the local market increases public understanding of the GSEs performance. For example, if the national aggregate data showed that one GSE lagged the market in funding loans in underserved areas, it would be of interest to the public to

determine if this reflected particularly poor performance in a few large MSAs or if it reflected shortfalls in many MSAs. In this case, an analysis of individual MSA data increases public understanding of that GSE's performance.

12. GSE Market Shares: Home Purchase and First-Time Homebuyer Loans

This section examines the role that the GSEs have played in the overall affordable lending market for home loans. There are two differences from the above analyses in Sections E.9 and E.10. The first difference is that this section focuses on "market share" percentages rather than "distribution of business" percentages. A "market share' percentage measures the share of loans with a particular borrower or neighborhood characteristic that is funded by a particular market sector (such as FHA or the GSEs). In other words, a "market share" percentage measures a sector's share of all home loans originated for a particular targeted group. The "market share" of a sector depends not only on the degree to which that sector concentrates its business on a targeted group (i.e., its "distribution of business" percentage) but also on the size, or overall mortgage volume, of the sector. If an industry sector has a large "market share" for a targeted group, then that sector is making an important contribution to meeting the credit needs of the group. Both "distribution of business" and "market share" data are important for evaluating the GSEs performance. In fact, given the large size of the GSEs', one would expect that a "market share" analysis would highlight their importance to the affordable lending market.

The second difference is that this section also examines the role of the GSEs in the total market for home loans, as well as in the conventional conforming market. Such an approach provides a useful context for commenting on the contribution of Fannie Mae and Freddie Mac to overall affordable lending, particularly given evidence that conventional lenders have done a relatively poor job providing credit access to disadvantaged families, which renders the conventional market a poor benchmark for evaluating GSE performance. The analysis of first-time homebuyers conducts the market share analysis in terms of both the total market Section E.12.b) and the conventional conforming market (Section E.12.c).

While the GSEs have accounted for a large share of the overall market for home purchase loans, they have accounted for a very small share of the market for important groups such as minority first-time homebuyers. But as this section documents, the GSEs have been increasing their share of the low-income and minority market, which provides an optimistic note on which to go

Section E.12.a uses HMDA and GSE data to estimate the GSEs' share of home loans originated for low-income and minority borrowers and their neighborhoods. Sections E.12.b and E.12.c summarize recent research on the role of the GSEs in the first-time homebuyer market. Section E.12.d examines the downpayment characteristics of home loans purchased by the GSEs, a potentially important determinant of the GSEs' ability to reach first-time homebuyers.

a. GSEs' Share of Home Purchase Lending

Table A.25 reports market share estimates derived by combining HMDA market data with GSE and FHA loan-level data. To understand these estimates, consider the GSE market share percentage of 46 percent for "All Home Purchase Loans" at the bottom of the first column in the table. That market share percentage is interpreted as follows:

It is estimated that home loans acquired by Fannie Mae and Freddie Mac during the years 1999 to 2002, totaled 46 percent of all home loans originated in metropolitan areas during that period.

It should be noted that "all home loans" refers to all government (FHA and VA) loans plus all conventional loans less than the conforming loan limit; in other words, only "jumbo loans" are excluded from this analysis.²⁶⁶ The analysis is restricted to metropolitan areas because HMDA data (the source of the market estimates) are reliable only for metropolitan areas. B&C originations are included in the market data, since the purpose here is to gauge the GSEs' role in the overall mortgage market. As discussed in Section E.9, excluding B&C loans, or even all subprime loans, would not materially affect this analysis of the home loan market since subprime loans are mainly for refinance purposes. The analysis below frequently combines purchases by Fannie Mae and Freddie Mac since previous sections have compared their performance relative to each other.

²⁶⁶ Following the purchase-year approach used in Sections E.9 and E.10, the GSE purchase data include their acquisitions of "prior-year" as well as "current-year" mortgages, while the market data include only newly-originated (or "current year") mortgages.

Table A.25

FHA-Insured Loans and GSE Purchases as Shares of Home Purchase Mortgages Originated in Metropolitan Areas During 1999-2002

		GSE Purchases	· · · · · · · · · · · · · · · · · · ·	FHA-Insured
	1999-2002	2001	2002	1999-2002
Low-Income Borrowers	37%	40%	43%	26% 1
African-American and				
Hispanic Borrowers	29	32	34	33
Low-Income Tracts	34	38	44	26
High Minority Tracts	37	40	45	26
Underserved Areas ²	36	39	44	25
All Home Purchase Loans	46	48	50	18

Source: 1999, 2000, 2001, and 2002 GSE, FHA, and HMDA data.

Notes: The FHA figures refer to percentages of all newly-mortgaged home purchase mortgage loans (except jumbo loans above the conforming loan limit) in metropolitan areas that were FHA insured during 1999, 2000, 2001, and 2002; the FHA data are from FHA. The GSE figures are defined differently—they include GSE purchases in metropolitan areas during 1999 to 2002, of 1999-2002 conventional conforming mortgage originations and originations prior to 1999. (About 28% of the GSEs' 1999 purchases were mortgages originated prior to 1999.) Borrower and race percentages are calculated by reallocating missing FHA, GSE, and conventional market data for these variables. FHA had fewer cases with missing data than the GSEs and the market. As with the FHA data, the GSE purchases are expressed as a percentage of the total market in metropolitan areas. In this table, the "total market" includes all (government and conventional) home purchase mortgages originated in metropolitan areas during 1999, 2000, 2001, and 2002 that were below each year's conforming loan limit. The market data assume that HMDA covers 85 percent of the metropolitan mortgage market. A lower coverage assumption would increase the market totals and thus reduce the GSE and FHA market shares.

¹ That is, it is estimated that FHA insured 26 percent of all home purchase loans (below the conforming loan limit) that were originated for low-income borrowers in metropolitan areas during 1999-2002.

Metropolitan census tracts with (1) median income less than or equal to 90 percent of AMI or (2) minority concentration greater than or equal to 30 percent and tract median income less than or equal to 120 percent of AMI.

The GSE market share percentage for "Low-Income Borrowers" at the top of the first column of Table A.25 has a similar interpretation:

It is estimated that home loans for low-income borrowers acquired by Fannie Mae and Freddie Mac between 1999 and 2002 totaled 37 percent of all home loans originated for low-income borrowers in metropolitan areas.

According to the data in Table A.25. the GSEs account for a major portion of the market for targeted groups. For example, purchases by Fannie Mae and Freddie Mac represented 37 percent of the low-income-borrower market and 34–37 percent of the markets in lowincome, high-minority, and underserved census tracts. Thus, access to credit in these historically underserved markets depends importantly on the purchase activities of Fannie Mae and Freddie Mac. However, the data in Table A.25 show that the GSEs' role in low-income and minority markets is significantly less than their role in the overall home loan market. Fannie Mae and Freddie Mac accounted for 46 percent of all home loans but only 36 percent of the loans financing properties in underserved neighborhoods. Their market share was even lower for loans to African-American and Hispanic borrowers—29 percent, or 17 percentage points less than the GSEs' overall market share of 46 percent.

An encouraging finding is that the GSEs have increased their presence in the affordable lending market during 2001 and 2002, when they accounted for 38–45 percent of the loans financing properties in low-income, high-minority, and underserved neighborhoods and for 32–34 percent of loans for African-American and Hispanic borrowers. These market share figures for the GSEs are much higher than their performance during the two earlier years, 1999 and 2000.

To provide additional perspective, Table A.25 also reports market share estimates for FHA.²⁶⁷ During the 1999–2002 period, FHA's overall market share was less than half of the GSEs' market share, as FHA insured only 18 percent of all home mortgages originated in metropolitan areas. However, FHA's share of the underserved segments of the market are not far below the GSEs' share, and in one case actually higher by

a significant margin. For instance, between 1999 and 2001, FHA insured 26 percent of all mortgages originated in low-income census tracts, which was only eight percentage points less than the GSEs' market share of 34 percent in low-income census tracts. FHA's share of the market was particularly high for African-American and Hispanic borrowers, as FHA insured 33 percent of all home loans originated for these borrowers between 1999 and 2002—a figure four percentage points higher than the GSEs' share of 29 percent.268 Thus, during the 1999-2002 period, FHA's overall market share was only two-fifths (39 percent) of the GSEs' combined market share, but its share of the market for loans to African Americans and Hispanics was 14 percent larger than the GSEs' share of that market.

The data for the two recent years (2001 and 2002) indicate a larger market role for Fannie Mae and Freddie Mac relative to FHA. While the GSEs continued to have a much larger share of the overall market than FHA (48-50 percent for the GSEs versus 14-17 percent for FHA), their share of home loans for African Americans and Hispanics jumped to 32-34 percent during 2001 and 2002, which was higher than the percentage share for FHA (27–32 percent). The differentials in market share between FHA and the GSEs on the other affordable lending categories listed in Table A.25 were lower in 2001 and 2002 than in earlier years.

b. The GSEs' Share of the Total First-Time Homebuyer Market

This section summarizes two recent analyses of mortgage lending to first-time homebuyers; these two studies examine the total mortgage market, including both government and conventional loans originated throughout the U.S. (i.e., in both metropolitan areas and non-metropolitan areas). Section E.12.c will summarize a third study of first-time homebuyers that focuses on the conventional conforming market. All three studies are market share studies that examine the GSEs' role in the first-time homebuyer market.

First, a study by Bunce concluded that the GSEs have played a particularly small role in funding minority first-time

homebuyers.²⁶⁹ Because HMDA does not require lenders to report information on first-time homebuyers, Bunce used data from the American Housing Survey to estimate the number of first-time homebuyers in the market. Using American Housing Survey data on home purchases from 1997 to 1999, Bunce estimated that the GSEs' share of the market for first-time African-American and Hispanic homebuyers was only 10-11 percent, or less than one-third of their share (36 percent) of all home purchases during that period. FHA's share of this market was 36 percent, or twice its share (18 percent) of all home purchases.²⁷⁰ These data highlight the small role that the GSEs have played in the important market for minority firsttime homebuyers.

Bunce, Neal and Vandenbroucke (BNV) recently updated through 2001 the study by Bunce. In addition, BNV developed an improved methodology that combined industry, HMDA and AHS data to estimate the number of first-time homebuyers (by race and ethnicity) in the mortgage market during the years 1996 to 2001.²⁷¹ BNV's analysis includes the total mortgage

²⁶⁷ As explained in Section E.7, the GSEs' affordable lending performance is evaluated relative to the conventional conforming market, as required by Congress in the 1992 GSE Act that established the housing goals. However, it is insightful to examine their overall role in the mortgage market and to contrast them with other major sectors of the market such as FHA. There is no intention here to imply that the GSEs should purchase the same types of loans that FHA insures.

²⁶⁸ As explained in the notes to Table A.25, HMDA data are the source of the market figures. It is assumed that HMDA data cover 85 percent of all mortgage originations in metropolitan areas. If HMDA data covered higher (lower) percentages of market loans, then the market shares for both the GSEs and FHA would be lower (higher).

²⁶⁹ See Harold L. Bunce, *The GSEs' Funding of Affordable Loans: A 2000 Update,* Housing Finance Working Paper No. HF–013, Office of Policy Development and Research, HUD, April 2002.

²⁷⁰ Bunce explains numerous assumptions and caveats related to combining American Housing Survey data on homebuyers with FHA and GSE data on mortgages. For example, the American Housing Survey (AHS) data used by Bunce included both financed home purchases and homes purchased with cash. If only financed home urchases were used, the market shares of both FHA and the GSEs would have been slightly higher (although the various patterns would have remained the same). The AHS defines first-time homebuyers as buyers who have never owned a home, while FHA and the GSEs define a first-time homebuyer more expansively as buyers who have not owned a home in the past three years. If it were possible to re-define the FHA and GSE data to be consistent with the AHS data, the FHA and GSE first-time homebuyer shares would be lower (to an unknown degree). For additional caveats with the AHS data, also see David A. Vandenbroucke, Sue G. Neal, and Harold L. Bunce, "First-Time Homebuyers: Trends from the American Housing Survey," November 2001, U.S. Housing Market Condition, a quarterly publication of the Office of Policy Development and Research at HUD. In some years, home purchases as measured by the AHS declined while home purchases as measured by other data sources (e.g., HMDA) increased. In addition, the AHS home purchase data for separate minority groups (e.g., African-Americans, Hispanics) sometimes exhibited shifts inconsistent with other sources.

²⁷¹ BNV's methodology for estimating first-time borrowers consists of three steps: (1) Estimate the total number of home purchase loans originated during a particular year using a mortgage market model that they develop; (2) disaggregate the home purchase loans in step (1) into racial and ethnic groups using HMDA data for metropolitan areas; and (3) for each racial and ethnic group in step (2), estimate the number of first-time homebuyers using mortgage and first-time homebuyer information from the American Housing Survey.

market, that is, the government, conventional conforming, and jumbo sectors of the mortgage market.

Table A.26 presents the key market shares estimated by BNV for the GSEs and FHA. The first figure (40.7) in Table A.26 is interpreted as follows: purchases of home loans by Fannie Mae and Freddie Mac totaled 40.7 percent of all home loans financed between 1996 and 2001. Going down the first column shows that the GSEs' share of the first-

time homebuyer market was 24.5 percent during the 1996–to–2001—a market share significantly lower than their overall market share of 40.7 percent.

Table A.26

Role of GSEs in First-Time Homebuyer Market Market Shares, 1996-2001

	1996-2001	100		1999-2001	70.1			2001		
GSE (FHA) Share of Market for:	GSEs	FHA	Fannie Mae	Freddie	GSEs	FHA	Fannie Mae	Freddie Mac	GSEs	FHA
I. All Homebuyers	40.7 % 1	16.6 %	23.8 %	17.7 %	41.5 %	16.4 %	28.1 %	20.6 %	48.7 %	16.7 %
a. African-American and Hispanic	23.8	32.0	14.9	9.4	24.3	31.2	19.6	1.1	30.7	30.9
b. Minority	28.9	27.5	18.1	11.3	29.4	26.8	22.9	13.6	36.5	25.5
2. First-Time Homebuyers	24.5	30.9	14.4	6.7	24.1	31.2	16.9	9.11	28.5	30.7
a. African-American and Hispanic	14.0	44.8	9.1	5.2	14.3	46.5	12.6	7.1	19.7	46.1
b. Minority	17.3 2	38.7	10.8	6.4	17.2	39.1	14.7	8.5	23.2	37.8

from the census tract file of the Public Use Data Base. Missing race and ethnicity data are re-allocated based on the race and ethnicity percentage distribution of the non-missing data. FHA home purchase loan data are from FHA. The market includes all home purchase mortgages (government, conventional conforming, and jumbo loans); see text for Source: Bunce, Neal, and Vandenbroucke (2003). GSE home purchase loan data are from the loan-level data they report to HUD. The GSE first-time homebuyer data are explanations of mortgage market estimates for all homebuyers and first-time homebuyers.

¹ Interpreted as follows: Purchases of home loans by the GSEs between 1996 and 2001 totaled 40.7 percent of all home loans originated during that period.

² Interpreted as follows: Purchases of home loans by the GSEs between 1996 and 2001 totaled 17.3 percent of all home loans originated for minority first-time homebuyers during that period.

FHA's greater focus on first-time homebuyers is also reflected in the market share data reported in Table A.26. While FHA insured only 16.6 percent of all home loans originated between 1996 and 2001, it insured 30.9 percent of all first-time-homebuyer loans during that period. The GSEs, on the other hand, accounted for a larger share (40.7 percent) of the overall home purchase market but a smaller share (24.5 percent) of the first-time homebuyer market.

Table A.26 also reports home purchase and first-time homebuyer information for minorities. During the more recent 1999-to-2001 period, the GSEs' loan purchases represented 41.5 percent of all home mortgages but only 24.3 percent of home loans for African-American and Hispanic families, and just 14.3 percent of home loans for African-American and Hispanic firsttime homebuyers. During this period, the GSEs' role in the market for firsttime African-American and Hispanic homebuyers was only one-third of their role in the overall home loan market (14.3 percent versus 41.5 percent).

FHA, on the other hand, accounted for a much larger share of the minority first-time homebuyer market than it did of the overall homebuyer market. Between 1999 and 2001, FHA insured 46.5 percent of all loans for African-American and Hispanic first-time homebuyers—a market share that was almost three times its overall market share of 16.4 percent.272 While FHA's

market share was two-fifths of the GSEs' share of the overall home purchase market (16.4 percent versus 41.5 percent), FHA's market share was over three times the GSEs' share of the market for first-time African-American and Hispanic homebuyers (46.5 percent versus 14.3 percent). This finding that the GSEs have played a relatively minor role in the first-time minority market is similar to the conclusion reached by the Fed researchers (see below) and Bunce (2002) that the GSEs have provided little credit support to this underserved borrower group.

The results reported in Table A.26 for the year 2001 suggest some optimism concerning the GSEs' role in the firsttime homebuyer market. As explained in earlier sections, both GSEs, but particularly Fannie Mae, improved their affordable lending performance during 2001, at a time when the overall market's performance was slightly declining. This improvement is reflected in the higher first-time market shares for the GSEs during the year 2001, compared with the two previous years, 1999 and 2000 (not reported). The

conventional conforming market in metropolitan areas calculated using the same methodology as Table A.25 with (b) the 1999–2001 market share estimates reported in Table A.25 for the entire mortgage market (including jumbo loans and covering non-metropolitan areas as well as metropolitan areas). The results are strikingly consistent. For the 1999-to-2001 period, the FHA share of the overall (African American and Hispanic) home loan market is estimated to be 19.0 percent (35.8 percent) under (a) versus 16.4 percent (31.2 percent) under (b). Lower percentage shares are expected for (b) because (b) includes jumbo loans. For the same period, the GSE share of the overall (African American and Hispanic) home loan market is estimated to be 46.0 percent (25-28 percent) under (a) versus 41.5 percent (24.3 percent) GSEs' share of the market for first-time African-American and Hispanic homebuyers jumped from about 11–12 percent during 1999 and 2000 to 19.7 percent in 2001. Fannie Mae's share of this market almost doubled during this period, rising from 7.0 percent in 1999 to 12.6 percent in 2001. Thus, while the GSEs continue to play a relatively small role in the minority first-time homebuyer market, during 2001 they improved their performance in this area.²⁷³

c. The GSEs' Share of the Conventional Conforming, First-Time Homebuyer

Bunce and Gardner (2004) recently conducted an analysis of first-time homebuyers for the conventional conforming market. The Bunce and Gardner analysis used a similar methodology to the study by Bunce, Neal, and Vandenbroucke of first-time homebuyers in the total mortgage market. Bunce and Gardner restricted their analysis to the funding of first-time homebuyers in the conventional conforming market, which is the market where Fannie Mae and Freddie Mac operate. Their market share results are summarized in Table A.27. BILLING CODE 4210-27-P

²⁷² See Bunce, Neal, and Vandenbroucke, op. cit., for comparisons of various estimates of the market shares for FHA and the GSEs using different data bases and estimation methods. One can compare (a) the 1999-2001 market shares for FHA and the

²⁷³ For other analyses of the GSEs' market role. see the following study by economists at the Federal Reserve Board: Glenn B. Canner, Wayne Passmore, and Brian J. Surette, "Distribution of Credit Risk among Providers of Mortgages to Lower-Income and Minority Homebuyers" in Federal Reserve Bulletin, 82(12): 1077-1102, December, 1996. This study considered several characteristics of the GSEs' loan purchases (such as amount of downpayment) and concluded that the GSEs have played a minimal role in providing credit support for underserved borrowers.

Table A.27

GSEs' Share of Conventional Conforming Loans for All Homebuyers and for First-Time Homebuyers, 1996-2001

<u>All Homebuyers</u>	1999-2001	1996-2001
Fannie Mae Purchases	32.5%	32.4%
Freddie Mac Purchases	24.0%	23.2%
Both GSEs' Purchases	56.6%	55.5%
African-American and Hispanic Homebuyers		
Fannie Mae Purchases	27.7%	28.3%
Freddie Mac Purchases	17.5%	16.7%
Both GSEs' Purchases	45.2%	45.0%
Minority Homebuyers		
Fannie Mae Purchases	31.4%	31.9%
Freddie Mac Purchases	19.5%	18.8%
Both GSEs' Purchases	50.9%	50.7%
All First-Time Homebuyers		
Fannie Mae Purchases	22.9%	24.7%
Freddie Mac Purchases	16.9%	16.3%
Both GSEs' Purchases	39.8%	41.0%
African-American and Hispanic		
<u>First-Time Homebuyers</u>		
Fannie Mae Purchases	19.0%	20.2%
Freddie Mac Purchases	11.9%	10.4%
Both GSEs' Purchases	30.9%	30.6%
Minority First-Time Homebuyers		
Fannie Mae Purchases	20.1%	22.1%
Freddie Mac Purchases	13.0%	12.1%
Both GSEs' Purchases	33.1%	34.2%

Source: These data cover the entire U.S. market (i.e., both metropolitan and non-metropolitan areas.) See Bunce and Gardner (2004) for derivation of the conventional conforming market estimates and the source of the GSE data. Missing race and ethnicity data for first-time homebuyers are re-allocated based on the race and ethnicity percentage distribution of the non-missing data.

Between 1999 and 2001, the GSEs' purchases accounted for 56.6 percent of all home loans originated in the conventional conforming market of both metropolitan areas and nonmetropolitan areas. In other words, Fannie Mae and Freddie Mac funded almost three out of every five homebuyers entering the conventional conforming market between 1999 and 2001. Their purchases of first-time homebuyer loans, on the other hand, accounted for only 39.8 percent of all first-time homebuyer loans originated in that market. Thus, while the GSEs funded approximately two out of every five first-time homebuyers entering the conventional conforming market, their market share (39.8 percent) for first-time homebuyers was only 70 percent of their market share (56.6 percent) for all home buyers.

As shown in Table A.27, the GSEs have funded an even lower share of the minority first-time homebuyer market. Between 1999 and 2001, the GSEs purchases of African-American and Hispanic first-time homebuyer loans represented 30.9 percent of the conventional conforming market for

these loans. Thus, while the GSEs have accounted for 56.6 percent of all home loans in the conventional conforming market, they have accounted for only 30.9 percent of loans originated in that market for African-American and Hispanic first-time homebuyers.

The market share data in Table A.27 show some slight differences between the Freddie Mac and Fannie Mae in serving minority first-time homebuyers. During the 1999-to-2001 period, Freddie Mac's share (11.9 percent) of the African-American and Hispanic firsttime homebuyer market was only onehalf of its share (24.0 percent) of the home loan market. On the other hand, Fannie Mae's share (19.0 percent) of the African-American and Hispanic firsttime homebuyer market was almost 60 percent of its share (32.5 percent) of the home loan market. Thus, while Fannie Mae performance in serving minority first-time homebuyers has been poor, it has been better than Freddie Mac's. This difference in performance between Fannie Mae and Freddie Mac was also seen in the portfolio percentages reported earlier in Table A.17. Loans for African-American and Hispanic firsttime homebuyers accounted for 6.9 percent of Fannie Mae's purchases of home loans between 1999 and 2001, a figure higher than Freddie Mac percentage of 5.3 percent. Loans for African-American and Hispanic first-time homebuyers accounted for 10.2 percent of all home loans originated in the conventional conforming market.

d. Downpayments on Loans Purchased by the GSEs

The level of downpayment can be an important obstacle to young families seeking their first homes. Examining the downpayment characteristics of the mortgages purchased by the GSEs might help explain why they have played a rather limited role in the first-time homebuyer market.

Table A.28 reports the loan-to-value (LTV) distribution of home purchase mortgages acquired by the GSEs between 1997 and 2002. In Table A.29, LTV data are provided for the GSEs' purchases of home loans that qualify for the three housing goals'special affordable, low-mod, and underserved areas. Three points stand out.

Table A.28

Loan-to-Value Distribution for GSE Home Purchase Loans, 1997-2002

'			Number of Mortgages	Aorigages					Percent of Total	f Total		
LTV Ratio	1997	1998	1999	2000	2001	2002	1997	8661	6661	2000	2001	2002
%08-0	534,685	681,789	629,425	711,178	019,667	886,024	56.6%	52.3%	53.3%	29.0%	53.1%	53.0%
%06-08	173,786	239,579	189,471	189,021	209,715	215,442	18.4%	18.4%	16.0%	15.7%	13.9%	12.9%
%56-06	188,041	289,999	253,117	219,891	275,973	275,782	96.61	22.2%	21.4%	18.3%	18.3%	16.5%
95% and Over	31,539	53,491	48,337	51,855	107,287	128,295	3.3%	4.1%	4.1%	4.3%	7.1%	7.7%
Missing	17,130	39,941	60,810	32,847	111,867	167,692	1.87	3.1%	5.1%	2.7%	7.4%	10.0%
Total Loans	945,181	1,304,799	1,181,160	1,204,792	1,504,452	1,673,235	100.0%	100.0%	100.0%	%0.001	100.0%	100.0%
Exhibit: Over 90%	219,580	343,490	301,454	271,746	383,260	404,077	23.2%	26.3%	25.5%	22.6%	25.5%	24.1%
•						Freddie Mac	Mac					
,			Number of Mortgages	Aortgages					Percent of Total	f Total		
LTV Ratio	1997	1998	1999	2000	2001	2002	1997	1998	1999	2000	2001	2002
208-0	339,526	456,975	474,156	525,455	617,456	640,394	56.3%	53.8%	55.9%	\$6.9%	59.8%	59.1%
%06-08	110,745	154,230	137,117	136,968	140,365	152,777	18.4%	18.2%	16.2%	14.8%	13.6%	14.1%
%56-06	146,293	204,804	184,971	181,996	213,864	185,064	24 2%	24 1%	21 8%	19 7%	20.7%	17.1%
95% and Over	6,456	22,203	43,601	54,543	44,232	51,890	1.1%	2.6%	5.1%	5.9%	4.3%	4.8%
Missing	364	11,107	8,767	24,134	16,768	53,790	0.1%	1.3%	1.0%	2.6%	%9 ′1	5.0%
Total Loans	603,384	849,319	848,612	923,096	1.032,685	1,083,915	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Exhibit: Over 90%	152,749	227,007	228,572	236,539	258,096	236,954	25.3%	26.7%	26 9%	25 6%	25.0%	21.9%

Table A.29

Loan-to-Value Characteristics of GSEs' Home Purchase Mortgages Meeting the Housing Goals, 1999-2002

						Fannie Mae	Mae					
LTV Ratio	-	Special Af	Fordable	***************************************		boM-wo.l	pol	***************************************		Underserved Areas	d Areas	
	1999	2000 2001	2001	2002	6661	2000	2001	2002	6661	2000	2001	2002
208-0	54.1%	55.2%	49.3%	48.1%	53.5%	56.3%	20.6%	51.3%	47.8%	53.1%	48.0%	46.8%
%06-08	13.8%	13.2%	12.5%	13.8%	16.4%	15.7%	14.2%	14.3%	17.9%	17.4%	15.2%	16.7%
%56-06	%1.61	18.0%	17.7%	18.5%	22.9%	20.4%	20.4%	%2.61	27.3%	22.2%	22.8%	22.5%
95% and Over	7.2%	8.4%	15.7%	14.7%	7.1%	7.4%	12.7%	12.7%	6.9%	7.2%	12.4%	12.4%
Missing	2.9%	5.1%	4.9%	4.9%	0.2%	0.2%	2.1%	2.1%	0.1%	0.1%	1.6%	1.6%
Total Loans	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Exhibit: Over 90%	26.2%	26.5%	33.4%	33.2%	29.9%	27.8%	33.1%	32.3%	34.2%	29.4%	35.2%	34.9%
						Freddie Mac	Mac					
LTV Ratio		Special Af	Fordable			Low-Mod	po			Underserved Areas	d Areas	
	1999	2000	2001	2002	1999	2000	2001	2002	6661	2000	2001	2002
%08-0	29.0%	52.4%	53.1%	55.9%	55.0%	52.4%	54.5%	56.1%	50.1%	47.4%	48.7%	53.3%
%-06-08	13.9%	12.3%	12.4%	15.5%	15.6%	14.1%	13.6%	15.0%	17.6%	15.7%	15.1%	17.6%
%56-06	19.4%	17.5%	19.0%	18.5%	23 2%	20 12	21 2%	20 0%	26 6%	24 6%	26.1%	20.8%
95% and Over	7.2%	12.6%	12.3%	4.7%	6.2%	10.1%	8.6%	4.1%	5.6%	9.4%	8.1%	3.6%
Missing	0.5%	5.2%	3.2%	5.4%	0.1%	3.4%	2.1%	4.7%	0.1%	2.9%	2.1%	4.8%
Total Loans	100.0%	%0:001	100.0%	100.0%	100.0%	100.0%	%0.001	20.001	%0.001	%0.001	100.0%	%0:001
Exhibit: Over 90%	26.6%	30.1%	31.2%	23.2%	29 3%	30.1%	26 62	24 2%	32.2%	34 0%	34 2%	24.3%
Note: Includes home nurchase mortgages fina	ne nurchase m		O-remores	Counted one-	noing owner-occupied one-unit properties							

First, the GSEs (and particularly Fannie Mae) have recently increased their purchases of home loans with low downpayments. After remaining about 4 percent of Fannie Mae's purchases between 1997 and 2000, over-95percent-LTV loans (or less-than-fivepercent downpayment loans) jumped to 7.1 percent during 2001 and 7.7 percent in 2002. It is interesting that this jump in less-than-five-percent downpayment loans occurred in the same years that Fannie Mae improved its purchases of loans for low-income homebuyers, as discussed in earlier sections. As a share of Freddie Mac's purchases, over-95percent-LTV loans increased from 1.1 percent in 1997 to 5.9 percent in 2000, before falling to 4.3 percent in 2001 and 4.8 percent in 2002. If the lowdownpayment definition is expanded to ten percent (i.e., over-90-percent-LTV loans), Freddie Mac had about the same percentage (25 percent) of lowdownpayment loans during 2001 as Fannie Mae. In fact, under the more expansive definition, Freddie Mac had the same share of over-90-percent-LTV loans in 2001 as it did in 1997 (about 25 percent), while Fannie Mae exhibited only a modest increase in the share of its purchases with low downpayments (from 23.2 percent in 1997 to 25.4 percent in 2001). The share of over-90percent-LTV loans in Freddie Mac's purchases fell sharply from 25.0 percent in 2001 to 21.9 percent in 2002, while the share in Fannie Mae's purchases fell more modestly from 25.4 percent in 2001 to 24.2 percent in 2002.

Second, loans that qualify for the housing goals have lower downpayments than non-qualifying loans. In 2001 and 2002, over-95percent-LTV loans accounted for about 15 percent of Fannie Mae's purchases of special affordable loans, 13 percent of low-mod loans, and 12 percent of underserved area loans, compared with about 7.5 percent of Fannie Mae's purchases of all home loans. (See Table A.29.) These low-downpayment shares for 2001 and 2002 were almost double those for 2000 when over-95-percent-LTV loans accounted for 8.4 percent of Fannie Mae's purchases of special affordable loans and about 7 percent of its purchases of low-mod and underserved area loans. Fannie Mae's low-downpayment shares during 2001 were higher than Freddie Mac's shares of 12.3 percent for special affordable loans and about 8 percent for low-mod and underserved area loans. Between 2001 and 2002, Freddie Mac's over-95percent-LTV shares fell sharply to 4-5 percent for the three housing goal categories, while Fannie Mae's shares

remained in the 12–15 percent range. Under the more expansive, over-90-percent-LTV definition, almost one-third of Fannie Mae's goals-qualifying purchases during 2001 would be considered low downpayment, as would a slightly smaller percentage of Freddie Mac's purchases. However, during 2002, Freddie Mac's over-90-percent-LTV shares for the goals-qualifying loans fell to 23–24 percent.

Third, a noticeable pattern among goals-qualifying loans purchased by the GSEs is the predominance of loans with high downpayments. For example, 55.9 percent of special affordable home loans purchased by Freddie Mac during 2002 had a downpayment of at least 20 percent, a percentage not much lower than the high-downpayment share (59.1 percent) of all Freddie Mac's home loan purchases. Similarly, 46.8 percent of the home loans purchased by Fannie Mae in underserved areas during 2002 had a 20 percent or higher downpayment, compared with 53.0 percent of all home loans purchased by Fannie Mae.

Thus, the data in Tables A.28 and A.29 show a preponderance of high downpayment loans, even among lowerincome borrowers who qualify for the housing goals. The past focus of the GSEs on high-downpayment loans provides some insight into a study by staff at the Federal Reserve Board who found that the GSEs have offered little credit support to the lower end of the mortgage market.²⁷⁴ The fact that approximately half of the goalsqualifying loans purchased by the GSEs have a downpayment of over 20 percent is also consistent with findings reported earlier concerning the GSEs' minimal service to first-time homebuyers, who experience the most problems raising cash for a downpayment. On the other hand, the recent experience of Fannie Mae suggests that purchasing lowdownpayment loans may be one technique for reaching out and funding low-income and minority families who are seeking to buy their first home.

13. Other Studies of the GSEs Performance Relative to the Market

This section summarizes briefly the main findings from other studies of the GSEs' affordable housing performance. These include studies by the HUD and the GSEs as well as studies by academics and research organizations.

Freeman and Galster Study.²⁷⁵ A recent study by Lance Freeman and George Galster uses econometric

analysis to test whether the Government-Sponsored Enterprises (GSEs) Fannie Mae and Freddie Mac purchases of home mortgages in neighborhoods traditionally underserved by financial institutions stimulate housing market activity in those neighborhoods. Specifically, this study analyzes data of single-family home sales volumes and prices of mortgages originated from 1993–1999 in Cleveland, OH.

The study concludes that aggressive secondary market purchasing behavior by non-GSE entities stimulated sales volumes and prices of homes in lowincome and predominantly minorityoccupied neighborhoods of Cleveland. The study results also showed a positive relationship between home transaction activity and the actions of the secondary mortgage market, and concludes that the secondary mortgage market (and the non-GSE sector in particular) purchases of mortgages had a positive effect on the number of sales transactions one year later. However, the study also concludes that although non-GSE purchases of non-home purchase mortgages appeared to boost prices one and two years later, no consistent impacts of purchasing rates on sales prices could be observed. In addition, there was no robust evidence that GSE purchasing rates were positively associated with singlefamily home transactions volumes or sales prices during any periods.

Urban Institute Rural Markets Study.276 A study by Jeanette Bradley, Noah Sawyer, and Kenneth Temkin uses both quantitative and qualitative data to explore the issue of GSE service to rural areas. The study first summarizes the existing research on rural lending and GSE service to rural areas. It then reviews the current underwriting guidelines of Fannie Mae, Freddie Mac, the USDA Rural Housing Service, and Farmer Mac, focusing on issues relevant to rural underwriting. The GSE publicuse database is used to analyze GSE non-metropolitan loan purchasing patterns from 1993–2000. Finally, the study presents the results of a series of discussions conducted with key national industry and lender experts and local experts in three rural sites in south-central Indiana, southwestern New Mexico and southern New Hampshire chosen for the diversity of their region, population, economic structures, and housing markets.

The authors of the study conclude that while Fannie Mae and Freddie Mac have increased their lending to rural areas since 1993, their non-metropolitan loan purchases still lag behind their role

²⁷⁴ Canner, et al., op. cit.

²⁷⁵ The Impact of Secondary Mortgage Market and GSE Purchases on Underserved Neighborhood Housing Markets: Final Report to HUD. July 2002.

²⁷⁶ GSE Service to Rural Areas, 2002.

in metropolitan loan purchases, particularly in regard to the percentage of affordable loans. From the discussions with experts, the authors of the study make the following policy recommendations: underserved populations and rural areas should be specifically targeted at the census-tract level; HUD should set manufactured housing goals; HUD should consider implementing a survey of small rural lenders or setting up an advisory group of small rural lenders in order to determine their suggestions for creating stronger relationships between the GSEs and rural lenders with the goal of increasing GSE non-metropolitan purchase rates.

Urban Institute GSE Impacts Study.277 A report by Thomas Thibodeau, Brent Ambrose, and Kenneth Temkin analyzes the extent to which the GSEs' responses to The Federal Housing Enterprises Financial Safety and Soundness Act's (FHEFSSA) affordable housing goals have had their intended effect of making low- and moderate-income families better off. Specifically the report examines several methodologies determining that the conceptual model created by Van Order in 1996 278 provided the most complete description of how the primary and secondary markets interact. This model was then applied in a narrow scope to capital market outcomes which included GSE market shares and effective borrowing costs, and housing market outcomes that include low- and moderate-income homeownership rates. Finally, metropolitan American Housing Survey (AHS) data for eight cities were used to conduct empirical analyses of the two categories of outcomes. These cities included areas surveyed in 1992, the year before HUD adopted the affordable housing goals, to provide the baseline for the analysis. Four metropolitan areas were surveyed in 1992 and again in 1996: Cleveland, Indianapolis, Memphis and Oklahoma City. Four cities were surveyed in 1992 and again in 1998: Birmingham, Norfolk, Providence and Salt Lake City.

The study's empirical analysis suggests that the GSE affordable goals have helped to make homeownership more attainable for target families. The assessment of the effects of the affordable goals on capital markets showed that the GSE share of the

conventional conforming market has increased, especially for lower income borrowers and neighborhoods. The study also concludes that the affordable housing goals have an impact on the purchase decisions of Fannie Mae and Freddie Mac. The study also finds that interest rates are lower in markets in which Fannie Mae and Freddie Mac purchase a higher proportion of conventional loans. Finally, the study's analysis shows that overall lending volume in a metropolitan area increases when the GSEs purchase seasoned loans.

Specifically, that homeownership rates increased at a faster rate for low-income families when compared to all families, and that in a subset of MSAs, minority homeownership rates also grew faster when compared to overall homeownership changes in those MSAs.

Finally, the affordable housing goal effects were examined for 80 MSAs in relation to the homeownership rate changes between 1991 and 1997. The study found that the GSEs, by purchasing loans originated to lowincome families, helped to reduce the disparity between homeownership rates for lower and higher income families, suggesting that the liquidity created when the GSEs purchase loans originated to low-income families is recycled into more lending targeted to lower income homebuyers.

The authors of the study qualify their results by stating that they are based on available data that does not provide the level of detail necessary to conduct a fully controlled national assessment.

Williams and Bond Study.²⁷⁹ Richard Williams and Carolyn Bond examine GSE leadership of the mortgage finance industry in making credit available for low- and moderate-income families. Specifically, it asks if the GSEs are doing relatively more of their business with underserved markets than other financial institutions, and whether the GSEs' leadership helps to narrow the gap in home mortgage lending that exists between served and underserved markets. The study uses HMDA data for metropolitan areas and the Public Use Data Base at HUD for compilations of GSE data sets for the entire nation (GSE PUDB File B) to conduct descriptive and multivariate analyses of nationwide lending between 1993 and 2000. Additionally, separate analyses are conducted that include and exclude

loans from subprime and manufactured housing lenders.

The study concludes that the GSEs are not leading: They do not purchase relatively more underserved market loans than the primary market makes nor do they purchase as many of these loans as their secondary market competitors. Additionally, the study concludes that the disparities between the GSEs and the primary market are even greater once the growing role of subprime and manufactured housing is considered. The authors admit that there have been signs of progress, particularly in 1999 and 2000 when primary market lending to underserved markets increased and GSE purchases of underserved market loans increased even faster. Regardless, the study concludes that there continues to be significant racial, economic, and geographic disparities in the way that the benefits of GSE activities are distributed and that the benefits of GSE activities still go disproportionately to members of served rather than underserved markets.

14. The GSEs' Support of the Mortgage Market for Single-Family Rental Properties

The 1996 Property Owners and Managers Survey reported that 49 percent of rental units are found in the 'mom and pop shops" of the rental market"single-family" rental properties, containing 1-4 units. These small properties are largely individuallyowned and managed, and in many cases the owner-managers live in one of the units in the property. They include many properties in older cities, in need of financing for rehabilitation. Singlefamily rental units play an especially important role in lower-income housing, over half of such units are affordable to very low-income families.

There is not, however, a strong secondary market for single-family rental mortgages. While single-family rental properties comprise a large segment of the rental stock for lowerincome families, they make up a small portion of the GSEs' business. In 2001, the GSEs purchased \$84 billion in mortgages for such properties, but this represented 6 percent of the total dollar volume of the enterprises' 2002 business and 10 percent of total single-family units financed by each GSE. It follows that since single-family rentals make up such a small part of the GSEs business, they have not penetrated the singlefamily rental market to the same degree that they have penetrated the owneroccupant market. Table A.30 in Section G below shows that between 1999 and 2002, the GSEs financed 57 percent of

²⁷⁷ An Analysis of the Effects of the GSE Affordable Goals on Low- and Moderate-Income Families, 2001.

²⁷⁸ Van Order, Robert. 1996. "Discrimination and the Secondary Mortgage Market." In John Goering and Ronald Wienk, eds. *Mortgage Discrimination, Race, and Federal Policy*. The Urban Institute Press, Washington, DC: 335–363.

²⁷⁹ Are the GSEs Leading, and if So Do They Have Any Followers? An Analysis of the GSEs' Impact on Home Purchase Lending to Underserved Markets During the 1990s. University of Notre Dame Working Paper and Technical Series Number 2003– 2 2002

owner-occupied dwelling units in the conventional conforming market, but only 27 percent of single-family rental units.

There are a number of factors that have limited the development of the secondary market for single-family rental property mortgages thus explaining the lack of penetration by the GSEs. Little is collectively known about these properties as a result of the wide spatial dispersion of properties and owners, as well as a wide diversity of characteristics across properties and individuality of owners. This makes it difficult for lenders to properly evaluate the probability of default and severity of loss for these properties.

Single-family rental properties could be important for the GSEs housing goals, especially for meeting the needs of lower-income families. In 2002 around 70 percent of single-family rental units qualified for the Low- and Moderate-Income Goals, compared with 40 percent of one-family owner-occupied properties. This heavy focus on lowerincome families meant that singlefamily rental properties accounted for 15 percent of the units qualifying for the Low- and Moderate-Income Goal, even though they accounted for 10 percent of the total units (single-family and multifamily) financed by the GSEs.

Given the large size of this market, the high percentage of these units which qualify for the GSEs' housing goals, and the weakness of the secondary market for mortgages on these properties, an enhanced presence by Fannie Mae and Freddie Mac in the single-family rental mortgage market would seem warranted.²⁸⁰ Single-family rental housing is an important part of the housing stock because it is an important source of housing for lower-income households.

F. Factor 4: Size of the Conventional Conforming Mortgage Market Serving Low- and Moderate-Income Families Relative to the Overall Conventional Conforming Market

The Department estimates that dwelling units serving low- and moderate-income families will account for 51–57 percent of total units financed in the overall conventional conforming

mortgage market during 2005–2008, the period for which the Low- and Moderate-Income Housing Goal is proposed. The market estimates exclude B&C loans and allow for much more adverse economic and market affordability conditions than have existed recently. Between 1999 and 2002 the low-mod market averaged about 57 percent. The detailed analyses underlying these estimates are presented in Appendix D.

G. Factor 5: GSEs' Ability To Lead the Industry

FHEFSSA requires the Secretary, in determining the Low- and Moderate-Income Housing Goal, to consider the GSEs' ability to "lead the industry in making mortgage credit available for low- and moderate-income families." Congress indicated that this goal should "steer the enterprises toward the development of an increased capacity and commitment to serve this segment of the housing market" and that it "fully expect[ed] [that] the enterprises will need to stretch their efforts to achieve [these goals]." 281

The Department and independent researchers have published numerous studies examining whether or not the GSEs have been leading the singlefamily market in terms of their affordable lending performance. This research, which is summarized in Section E, concludes that the GSEs have generally lagged behind primary lenders in funding first-time homebuyers, lower-income borrowers and underserved communities. As required by FHEFSSA, the Department has produced estimates of the portion of the total (single-family and multifamily) mortgage market that qualifies for each of the three housing goals (see Appendix D). Congress intended that the Department use these market estimates as one factor in setting the percentage target for each of the housing goals. The Department's estimate for the size of the Low- and Moderate-Income market is 51-57 percent, which is higher than the GSEs' performance on that goal.

This section provides another perspective on the GSEs' performance by examining the share of the total

conventional conforming mortgage market and the share of the goal-qualifying markets (low-mod, special affordable, and underserved areas) accounted for by the GSEs' purchases. This analysis, which is conducted by product type (single-family owner, single-family rental, and multifamily), shows the relative importance of the GSEs in each of the goal-qualifying markets.

1. GSEs' Role in Major Sectors of the Mortgage Market

Tables A.30 and A.31 compare GSE mortgage purchases with HUD's estimates of the numbers of units financed in the conventional conforming market. Table A.30 presents aggregate data for 1999-2002 while Table A.31 presents more summary market share data for individual years 2000 and 2002.282 HUD estimates that there were 48,270,415 owner and rental units financed by new conventional conforming mortgages between 1999 and 2002. Fannie Mae's and Freddie Mac's mortgage purchases financed 23,580,594 of these dwelling units, or 49 percent of all dwelling units financed. As shown in Table A.30, the GSEs have played a smaller role in the goalsqualifying markets than they have played in the overall market. Between 1999 and 2002, new mortgages were originated for 27,158,020 dwelling units that qualified for the Low- and Moderate-Income Goal; the GSEs lowmod purchases financed 11,408,692 dwelling units, or 42 percent of the lowmod market. Similarly, the GSEs' purchases accounted for 41 percent of the underserved areas market, but only 35 percent of the special affordable market. Obviously, the GSEs have not been leading the industry in financing units that qualify for the three housing goals. They need to improve their performance and it appears that there is ample room in the non-GSE portions of the goals-qualifying markets for them to do so. For instance, the GSEs were not involved in almost two-thirds of the special affordable market during the 1999-to-2002 period.

BILLING CODE 4210-27-P

Specifically, it considers GSE purchases of: (a) 1999 mortgage originations during 1999 and 2000; (b) 2000 originations during 2000 and 2002; and (c) 2002 originations during 2002 (and 2002 will be added when those data become available in March 2003). In other words, this analysis looks at the GSEs' purchases of a particular origination year cohort over a two-year period. This approach contrasts with the approach that examines GSE purchases on a "backward looking basis by purchase year", for example, GSE purchases during

1999 of both new 1999 originations and originations during previous years (the latter called "prior-year" or seasoned loans). Either approach is a valid method for examining GSE purchases; in fact, when analyzing aggregated data such as the combined 1999–2002 data in Table A.30, the two approaches yield somewhat similar results. HUD's methodology for deriving the market estimates is explained in Appendix D. B&C loans have been excluded from the market estimates in Tables A.30 and A.31.

²⁸⁰ A detailed discussion of the GSEs' activities in this area is contained in Theresa R. Diventi, The GSEs' Purchases of *Single-Family Rental Property Mortgages*, Housing Finance Working Paper No. HF–004, Office of Policy Development and Research, Department of Housing and Urban Development, (March 1998).

²⁸¹ Senate Report 102–282, May 15, 1992, p. 35.

²⁸² Tables A.30 and A.31 examine GSE purchases on a "going forward basis by origination year."

Table A.30

Number of Newly-Mortgaged Units by Type in the 1999-2002 Conventional Conforming Market Compared To Fannie Mae and Freddie Mac Purchases

	Single-Family Owner	mily	Single-Family Rental	mily I	Multifamily	viiv.	Total Renta	ntal	Total Market	rket
Total Units										
Market	34,600,351	71.7%	6,652,020	13.8%	7,018,044	14.5%	13,670,064	28.3%	48,270,415	100.0%
Fannie Mae	11,218,908	81.9%	1,161,490	8.5%	1,316,132	%9.6	2,477,622	18.1%	13,696,530	100.0%
Freddie Mac	8,442,070	85.4%	629,221	6.4%	812,772	8.2%	1,441,993	14.6%	9,884,063	100.0%
GSE Total	19,660,978	83.4%	1,790,711	7.6%	2,128,904	9.0%	3,919,615	16.6%	23,580,594	100.0%
GSE % of Market	26.8%		26.9%		30.3%		28.7%		48.9%	
Low-Mod Units										
Market	14,854,964	54.7%	5,986,817	22.0%	6,316,239	23.3%	12,303,056	45.3%	27,158,020	100.0%
Fannie Mae	4,533,822	66.8%	1,036,199	15.3%	1,216,084	17.9%	2,252,283	33.2%	6,786,105	100.0%
Freddie Mac	3,314,500	71.7%	554,914	12.0%	753,171	16.3%	1,308,086	28.3%	4,622,586	100.0%
GSE Total	7,848,322	68.8%	1,591,113	13.9%	1,969,256	17.3%	3,560,369	31.2%	11,408,692	100.0%
GSE % of Market	52.8%		26.6%		31.2%		28.9%		42.0%	
Underserved Area Units										
Market	9,193,023	58.0%	2,984,588	18.8%	3,672,576	23.2%	6,657,164	42.0%	15,850,187	100.0%
Fannie Mae	2,775,679	70.9%	600,645	15.3%	541,268	13.8%	1,141,913	29.1%	3,917,592	100.0%
Freddie Mac	2,035,600	76.8%	306,968	11.6%	308,938	11.7%	615,906	23.2%	2,651,506	100.0%
GSE Total	4,811.279	73.2%	907,612	13.8%	850,206	12.9%	1,757,819	26.8%	860,695,9	100.0%
GSE % of Market	52 3%		30.4%		23.2%		26.4%		41.4%	
Special Affordable Units										
Market	5,303,912	40 1%	3,858,171	29.2%	4,070,466	30 8%	7,928,637	29.9%	13,232,549	%0 001
Fannie Mae	1,487,409	53 5%	580,794	20.9%	711,825	25 6%	1,292,619	46.5%	2,780,028	%0 0 01
Freddie Mac	1,099,028	605%	316,283	17.4%	399,862	22.0%	716,145	39.5%	1,815,172	100 0%
GSE Total	2,586,437	56.3%	710,768	19.5%	1,111,687	24.2%	2,008,764	43.7%	4,595,201	100.0%
GSE % of Market	48.8%		23.3%		27.3%		25.3%		34.7%	

including B&C loans in the owner market would have reduced the GSE share of the owner market from 56.8 percent to 52.5 percent. See Appendix D for an Source: The market data are the estimated number of newly mortgaged units between 1999-2002. The single-family owner market data exclude B&C loans; explanation of the market methodology. The GSE data include units from mortgages originated between 1999 and 2002 and purchased by one of the GSEs during the same period. GSE data with missing affordability or geocode are reallocated based the distribution of existing data.

Table A.31

GSE Share of Newly-Mortgaged Units Conventional Conforming Market 2000, 2001 and 2002

į	Single-Family Owner	Single-Family Rental	Multifamily	Total Rental	Total Market
2000 Financed Units Total	48	23	32	28	41
Low-Mod	44	22	33	28	36
Underserved Area	44	26	24	25	35
Special Affordable	40	20	29	25	31
2001 Financed Units					
Total	57	27	32	30	49
Low-Mod	54	28	33	30	43
Underserved Area	53	31	25	28	42
Special Affordable	50	25	28	26	36
2002 Financed Units					
Total	62	32	32	32	54
Low-Mod	58	31	32	32	47
Underserved Area	57	37	23	30	47
Special Affordable	26	27	29	28	40

Source: See notes to Table A.27. The first figure ("50") is interpreted as follows: Fannie Mae's and Freddie Mac's acquisitions (during 2000, 2001 and 2002) of single-family-owner home purchase mortgages originated in 2000 accounted for 50 percent of all such mortgages originated that year in the conventional conforming market. While the GSEs are free to meet the Department's goals in any manner that they deem appropriate, it is useful to consider their performance relative to the industry by property type. The GSEs accounted for 57 percent of the single-family owner market but only 30 percent of the multifamily market and 27 percent of the single-family rental market (or a combined 29 percent share of the rental market).

Single-family Owner Market. As stated in the 2000 Rule, the singlefamily-owner market is the bread-andbutter of the GSEs' business, and based on the financial and other factors discussed below, the GSEs clearly have the ability to lead the primary market in providing credit for low- and moderateincome owners of single-family properties. However, the GSEs have historically lagged behind the market in funding single-family-owner loans that qualify for the housing goals and, as discussed in Section E, they have played a rather small role in funding minority first-time homebuyers. The market share data reported in Table A.30 for the single-family-owner market tell the same story. The GSEs' purchases of single-family-owner loans represented 57 percent of all singlefamily-owner loans originated between 1999 and 2002, compared with 53 percent of the low-mod loans that were originated, 52 percent of underserved area loans, and 49 percent of the special affordable loans.

The data in Table A.31 indicate the GSEs' growing market share during the heavy refinance years of 2001 and 2002. For example, the GSEs accounted for 62 percent of the overall single-familyowner market that year, and 56-58 percent of the markets covered by the three housing goal categories. While this improvement is an encouraging trend, there are ample opportunities for the GSEs to continue their improvement. Almost one-half of the goals-qualifying loans originated during 2002 remained available to the GSEs to purchase; there are clearly affordable loans being originated that the GSEs can purchase. Furthermore, the GSEs' purchases under the housing goals are not limited to new mortgages that are originated in the current calendar year. The GSEs can purchase loans from the substantial, existing stock of affordable loans held in lenders' portfolios, after these loans have seasoned and the GSEs have had the opportunity to observe their payment performance. In fact, based on Fannie Mae's recent experience, the purchase of seasoned loans appears to be one effective strategy for purchasing goals-qualifying loans.

Single-family Rental Market. Single-family rental housing is a major source of low-income housing. As discussed in Appendix D, data on the size of the primary market for mortgages on these properties is limited, but available information indicate that the GSEs are much less active in this market than in the single-family owner market. HUD estimates that GSE purchases between 1999 and 2002 totaled only 27 percent of all newly-mortgaged single-family rental units that were affordable to low-and moderate-income families.

As explained in the 2000 Rule, many of these properties are "mom-and-pop" operations, which may not follow financing procedures consistent with the GSEs' guidelines. Much of the financing needed in this area is for rehabilitation loans on 2-4 unit properties in older areas, a market in which the GSEs' have not played a major role. However, this sector could certainly benefit from an enhanced role by the GSEs, and the data in Table A.30 indicate that there is room for such an enhanced role, as approximately threefourths of this market remains for the GSEs to enter.

Multifamily Market. Fannie Mae is the largest single source of multifamily finance in the United States, and Freddie Mac has made a solid reentry into this market over the last nine years. However, there are a number of measures by which the GSEs lag the multifamily market. For example, the share of GSE resources committed to the multifamily purchases falls short of the multifamily proportion prevailing in the overall mortgage market. HUD estimates that newly-mortgaged units in multifamily properties represented almost 14 percent of all (single-family and multifamily) dwelling units financed between 1999 and 2002.283 As shown in Table A.30, multifamily acquisitions represented 9 percent of dwelling units financed by the GSEs between 1999 and 2002.

The GSEs' role in the multifamily market is significantly smaller than in single-family. As shown in Table A.30, GSE purchases have accounted for 30 percent of newly financed multifamily units between 1999 and 2002—a market share much lower than their 57 percent share of the single-family-owner market. Stated in terms of portfolio shares,

single-family-owner loans accounted for 83 percent of all dwelling units financed by the GSEs during this period, versus 73 percent of all units financed in the conventional conforming market.

While it is recognized that the GSEs have been increasing their multifamily purchases, a further enlargement of their role in the multifamily market seems feasible and appropriate, particularly in the affordable (lower rent) end of the market. As noted in Section D.3, market participants believe that the GSEs have been conservative in their approaches to affordable multifamily lending and underwriting.²⁸⁴ Certainly the GSEs face a number of challenges in better meeting the needs of the affordable multifamily market. For example, thrifts and other depository institutions may sometimes retain their best loans in portfolio, and the resulting information asymmetries may act as an impediment to expanded secondary market transaction volume.²⁸⁵ However, the GSEs have demonstrated that they have the depth of expertise and the financial resources to devise innovative solutions to problems in the multifamily market. The GSEs can build on their recent records of increased multifamily lending and innovative products to make further in-roads into the affordable market. As explained in Section D.3, the GSEs have the expertise and market presence to push simultaneously for market standardization and for programmatic flexibility to meet the special needs and circumstances of the lower-income portion of the multifamily market.

Conclusions. While HUD recognizes that some segments of the market may be more challenging for the GSEs than others, the data reported in Tables A.30 and A.31 show that the GSEs have ample opportunities to purchase goalsqualifying mortgages. Furthermore, if a GSE makes a business decision to not pursue certain types of goals-qualifying loans in one segment of the market, they are free to pursue goals-qualifying owner and rental property mortgages in other segments of the market. As market leaders, the GSEs should be looking for innovative ways to pursue this business. Furthermore, there is evidence that the GSEs can earn reasonable returns on their goals business. The Regulatory Analysis that accompanies this proposed rule provides evidence that

²⁸³ Based on Table A.30, multifamily properties represented 14.5 percent of total units financed between 1999 and 2002 (obtained by dividing 7,018,044 multifamily units by 48,270,415 "Total Market" units). Increasing the single-family-owner number in Table A.30 by 2,817,258 to account for excluded B&C mortgages increases the "Total Market" number to 51,087,673 which produces a multifamily share of 13.7 percent. See Appendix D for discussion of the B&C market.

²⁸⁴ Abt Associates, op. cit. (August 2002).

²⁸⁵ The problem of secondary market "adverse selection" is described in James R. Follain and Edward J. Szymanoski. "A Framework for Evaluating Government's Evolving Role in Multifamily Mortgage Markets," *Cityscape: A Journal of Policy Development and Research* 1(2),

the GSEs can earn financial returns on their purchases of goals-qualifying loans that are only slightly below their return on equity from their normal business.

2. Qualitative Dimensions of the GSEs' Ability To Lead the Industry

This section discusses several qualitative factors that are indicators of the GSEs' ability to lead the industry in affordable lending. It discusses the GSEs' role in the mortgage market; their ability, through their underwriting standards, new programs, and innovative products, to influence the types of loans made by private lenders; their development and utilization of state-of-the-art technology; the competence, expertise and training of their staffs; and their financial resources.

a. Role in the Mortgage Market

The GSEs have played a dominant role in the single-family mortgage market. As reported in Section C.3, mortgage purchases by the GSEs reached extraordinary levels in 2001 and 2003. Purchases by Fannie Mae stood at \$568 billion in 2001 and \$848 billion in 2002. Freddie Mac's singlefamily mortgage purchases were \$393 billion in 2001 and \$475 billion in 2002. The Office of Federal Housing Enterprise Oversight (OFHEO) estimates that the GSEs' purchased 40 percent of newly-originated conventional mortgages in 2001. Total GSE purchases, including loans originated in prior years, amounted to 46 percent of conventional originations in 2001

The dominant position of the GSEs in the mortgage market is reinforced by their relationships with other market institutions. Commercial banks, mutual savings banks, and savings and loans are their competitors as well as their customers-they compete to the extent they hold mortgages in portfolio, but at the same time they sell mortgages to the GSEs. They also buy mortgage-backed securities, as well as the debt securities used to finance the GSEs' portfolios. Mortgage bankers sell virtually all of their prime conventional conforming loans to the GSEs. Private mortgage insurers are closely linked to the GSEs, because mortgages purchased by the enterprises that have loan-to-value ratios in excess of 80 percent are normally required to be covered by private mortgage insurance, in accordance with the GSEs' charter acts.

b. Underwriting Standards for the Primary Mortgage Market

The GSEs' underwriting guidelines are followed by virtually all originators of prime mortgages, including lenders

who do not sell many of their mortgages to Fannie Mae or Freddie Mac. The guidelines are also commonly followed in underwriting "jumbo" mortgages, which exceed the maximum principal amount which can be purchased by the GSEs (the conforming loan limit)—such mortgages eventually might be sold to the GSEs, as the principal balance is amortized or when the conforming loan limit is otherwise increased. Changes that the GSEs have made to their underwriting standards in order to address the unique needs of low-income families were discussed in Section C.4 of this Appendix. The GSEs' market influence is one reason these new, more flexible underwriting standards have spread throughout the market. Because the GSEs' guidelines set the credit standards against which the mortgage applications of lower-income families are judged, the enterprises have a profound influence on the rate at which mortgage funds flow to low- and moderate-income borrowers and underserved neighborhoods.

As discussed below, the GSEs' new automated underwriting systems are widely used to originate mortgages in today's market. As discussed in Sections C.7 and C.8, the GSEs have started adapting their underwriting systems for subprime loans and other loans that have not met their traditional underwriting standards.

c. State-of-the-Art Technology

Both GSEs are in the forefront of new developments in mortgage industry technology. Automated underwriting and online mortgage processing are a couple of the new technologies that have impacted the mortgage market, expanding homeownership opportunities. This section provides an overview of these new technologies and the extent of their use.

Each enterprise released an automated underwriting system in 1995—Freddie Mac's "Loan Prospector" (LP) and Fannie Mae's "Desktop Underwriter" (DU). During 2001 and 2002, roughly 60 percent of all newly-originated mortgages that Freddie Mac purchased were processed through LP. Lenders and brokers used LP to evaluate 7.3 million loan applications in 2001 (almost double the amount in 2000) and 8.2 million loans in 2002.286 As of the end of 2002, LP had processed 25 million loans since its inception. Fannie Mae also reports that roughly 60 percent of the loans it purchased during 2001 and

2002 were processed through DU. DU evaluated more than 10 million loans in 2002, compared with 8 million in 2001. As of the end of 2002, DU had processed over 26 million loans since its inception. The GSEs' systems have also been adapted for FHA and jumbo loans. Automated underwriting systems are being further adapted to facilitate riskbased pricing, which enables mortgage lenders to offer each borrow an individual rate based on his or her risk. As discussed earlier, concerns about the use of automated underwriting and riskbased pricing include the disparate impact on minorities and low-income borrowers and the "black box" nature of the score algorithm.

The GSEs are using their state-of-theart technology in certain ways to help expand homeownership opportunities. For example, Fannie Mae has developed Fannie Mae Property GeoCoder a computerized mapping service offered to lenders, nonprofit organizations, and state and local governments to help them determine whether a property is located in an area that qualifies for Fannie Mae's community lending products designed to increase homeownership and revitalization in traditionally underserved areas. In addition, eFannieMae.com is Fannie Mae's business-to-business web site where lenders can access product information and important technology tools, view upcoming events, and receive news about training opportunities. This site receives on average 80,000 visitors per week.287 Freddie Mac has introduced in recent years internet-based debt auctions, debt repurchase operations, and debt exchanges. These mechanisms benefit investors by providing more uniform pricing, greater transparency and faster price discovery—all of which makes Freddie Mac debt more attractive to investors and reduces the cost of funding mortgages.288 In addition, Freddie Mac has provided automated tools for lenders to identify and work with borrowers most likely to encounter problems making their mortgage payments. EarlyIndicator has become the industry standard for default management technology. It can reduce the consequences of mortgage delinquency for borrowers, servicers and investors.289

The GSEs are also expanding homeownership opportunities through the use of the Internet in processing

²⁸⁶ This section is based heavily on "DU and LP Usage Continues to Rise," in *Inside Mortgage Technology* published by Inside Mortgage Finance, January 27, 2003, page 1–2.

²⁸⁷ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, pp. 10–11.

²⁸⁸ Freddie Mac, *2002 Annual Housing Activities Report*, 2003, p. 14.

 $^{^{289}\,\}mathrm{Freddie}$ Mac, 2002 Annual Housing Activities Report, 2003, p. 52.

mortgage originations. New online mortgage originations reached \$267.6 billion in the first half of 2002, compared with \$97 billion for the first six months of 2001. The 2002 six-month volume comprised 26.5 percent of the estimated \$1.01 trillion in total mortgage originations for the same time period.²⁹⁰ Freddie Mac made Loan Prospector on the Internet service available to lenders for their retail operations. Freddie Mac also adopted the mortgage industry's XML (extensible markup language) data standard, which is integral to streamlining and simplifying Internet-based transactions. In addition, Congress enacted legislation that allows the use of electronic signature in contracts in 2001, making a completely electronic mortgage transaction possible. With the use of electronic signatures, electronic mortgages are expected to improve the mortgage process, further reducing origination and servicing costs. In October 2000, Freddie Mac purchased its first electronic mortgage under the

Fannie Mae also offers a variety of other online tools and applications that have the potential to make the mortgage loan process more cost effective and efficient for lenders. For example, "HomeBuyer Funds Finder," a one-stop online resource designed for lenders and other housing professionals, enables users to access a database of local housing subsidy programs available for low- and moderate-income borrowers. In 2002, the HomeBuyer Funds Finder web site received over 24,500 hits.291 "Home Counselor Online" provides homeownership counselors with the necessary tools to help consumers financially prepare to purchase a home. As of February 2002, over 1,200 counselors representing 542 organizations were using Home Counselor Online. 292 A more complete list of Fannie Mae's online tool and applications can be found in its Annual Housing Activities Report. In 2002, Fannie Mae's total eBusiness volume was \$1.1 trillion, up from \$800 billion in 2000.293

d. Staff Resources

Both Fannie Mae and Freddie Mac are well-known throughout the mortgage industry for the expertise of their staffs

in carrying out their current programs, conducting basic and applied research regarding mortgage markets, developing innovative new programs, and undertaking sophisticated analyses that may lead to new programs in the future. The role that the GSEs have played in spreading the use of technology throughout the mortgage market reflects the enormous expertise of their staff. The leaders of these corporations frequently testify before Congressional committees on a wide range of housing issues, and both GSEs have developed extensive working relationships with a broad spectrum of mortgage market participants, including various nonprofit groups, academics, and government housing authorities.

e. Financial Strength

Fannie Mae. The benefits that accrue to the GSEs because of their GSE status. as well as their solid management, have made them two of the nation's most profitable businesses. Fannie Mae's net income was \$3.9 billion in 1999, \$4.4 billion in 2000, \$5.9 billion in 2001, and \$4.6 billion in 2002.294 Fannie Mae's return on equity averaged 24.0 percent over the 1995–99 period—far above the rates achieved by most financial corporations. Fannie Mae's return on equity reached 26.1 percent in 2002, an increase of 3 percent over the previous year.²⁹⁵ In 2002, Fannie Mae's core business earnings grew by 19 percent, credit losses fell to their lowest level since 1983 and taxable equivalent revenues grew by 17 percent.²⁹⁶

Fannie Mae's core business earnings have increased from 39 cents a share in 1987 to \$6.31 in 2002, and dividends per common share have increased from \$.96 in 1998 to \$1.32 in 2002, an 10 percent increase over 2001. Although operating earnings per diluted common share decreased from 2001 to 2002 by 21% to \$4.53, Fannie Mae has still produced double-digit increases for the past 16 years in core business earnings per share, placing them among the best of the \$\$8P\$ 500 companies.\$\$^{297}\$

Freddie Mac. Freddie Mac has shown similar trends. Freddie Mac's net income was \$3.7 billion in 2000 and rose to \$10.1 billion in 2002, an increase of 320 percent from the previous year. 298 Freddie Mac's return on equity averaged 23.4 percent over the 1995–99 period—also well above the rates achieved by most financial corporations. Freddie Mac's return on common equity exceeded 20 percent in 2001 for the twentieth consecutive year, reaching a high of 39.2 percent in 2001. Freddie Mac's total revenues grew to \$7.4 billion in 2001, up from \$4.5 billion in 2000.299

Investors in Freddie Mac's common stock have seen their annual dividends per share increase from \$0.68 in 2000 to \$0.88 in 2002.³⁰⁰ Earnings per diluted common share increased from \$4.23 in 2001 to \$14.18 in 2002.³⁰¹

Other Indicators. Additional indicators of the strength of the GSEs are provided by various rankings of American corporations. Business Week has reported that among Standard & Poor's 500 companies in 1999, Fannie Mae and Freddie Mac respectively ranked 49th and 88th in market value, and 24th and 43rd in total profits. 302 Fannie Mae ranked 30th in market value and 13th in total profits in 2001, while Freddie Mac ranked 23rd in annual growth revenues from 1991–2001. 303

f. Conclusion About Leading the Industry

In light of these considerations, the Secretary has determined that the GSEs have the ability to lead the industry in making mortgage credit available for low- and moderate-income families.

H. Factor 6: The Need To Maintain the Sound Financial Condition of the GSEs

HUD has undertaken a separate, detailed economic analysis of this final rule, which includes consideration of (a) the financial returns that the GSEs earn on low- and moderate-income loans and (b) the financial safety and soundness implications of the housing goals. Based on this economic analysis and reviewed by the Office of Federal Housing Enterprise Oversight, HUD concludes that the goals raise minimal, if any, safety and soundness concerns.

²⁹⁰ Inside Mortgage Finance, "Online Volume Comprises One-Fourth of Total Originations in First Half '02,'' September 20, 2002, p. 8.

²⁹¹ Fannie Mae, 2002 Annual Housing Activities Report, 2003, p. 12.

 $^{^{292}}$ Fannie Mae, 2002 Annual Housing Activities Report, 2003, p. 11.

²⁹³ Fannie Mae, *2002 Annual Housing Activities Report*, 2003, p. 10.

²⁹⁴The 22% decrease in Fannie Mae's 2002 net income resulted primarily from a \$4.508 billion increase in purchased options expense, which occurred due to an increase in the notional amount of purchased options outstanding and the declining interest rate environment. Recorded purchased options expense for 2001 was only \$37 million by comparison. *Fannie Mae 2002 Annual Report*, 2003, p. 23.

²⁹⁵ Fannie Mae, *2002 Annual Report to Shareholders*, "Financial Highlights."

²⁹⁶ Fannie Mae, *2002 Annual Report to Shareholders,* Financial Highlights and Letter to Shareholders.

²⁹⁷ Fannie Mae, *2002 Annual Report to Shareholders,* Financial Highlights and Letter to Shareholders.

²⁹⁸ Freddie Mac, Consolidated Statements of Income, Restated November 21, 2003.

²⁹⁹ Freddie Mac, *2001 Annual Report to Shareholders*, pp. 21–22.

³⁰⁰ Freddie Mac, Consolidated Statements of Income, Restated November 21, 2003.

³⁰¹ Freddie Mac, Consolidated Statements of Income, Restated November 21, 2003.

³⁰² Business Week, March 27, 2000, p. 197. 303 The "2002 Fortune 500 Top Performing Companies and Industries." http://www.fortune.com/fortune/fortune500/topperformers/0,14940,00.html>.

I. Determination of the Low- and Moderate-Income Housing Goals

The annual goal for each GSE's purchases of mortgages financing housing for low- and moderate-income families is proposed to be established at 52 percent of eligible units financed in each of calendar years 2005, 53 percent in 2006, 55 percent in 2007, and 57 percent in 2008. This goal will remain in effect thereafter, unless changed by the Secretary prior to that time. In addition, a low- and moderate-income subgoal of 45 percent in 2005, 46 percent in 2006, and 47 percent in both 2007 and is proposed for the GSEs' acquisitions of single-family-owner home purchase loans in metropolitan areas. This subgoal is designed to encourage the GSEs to lead the primary market in offering homeownership opportunities to low- and moderateincome families. The Secretary's consideration of the six statutory factors that led to the choice of these goals is summarized in this section.

1. Housing Needs and Demographic Conditions

Affordability Problems. Data from the 2000 Census and the American Housing Surveys demonstrate that there are substantial housing needs among lowand moderate-income families. Many of these households are burdened by high homeownership costs or rent payments and will likely continue to face serious housing problems, given the dim prospects for earnings growth in entrylevel occupations. There is evidence of deep and persistent housing problems for Americans with the lowest incomes. Recent HUD analysis reveals that in 1999, 4.9 million households had "worst case" housing needs, defined as housing costs greater than 50 percent of household income or severely inadequate housing among unassisted very-low-income renter households. Among the 34 million renters in all income categories, 6.3 million (19 percent) had a severe rent burden and over one million renters (3 percent) lived in housing that was severely inadequate.

Demographic Trends. Changing population demographics will result in a need for the primary and secondary mortgage markets to meet nontraditional credit needs, respond to diverse housing preferences and overcome information and other barriers that many immigrants and minorities face. It is projected that there will be 1.2 million new households each year over the next decade. The aging of the baby-boom generation and the entry of the baby-bust generation into prime home buying

age will have a dampening effect on housing demand. However, the continued influx of immigrants will increase the demand for rental housing, while those who immigrated during the 1980s and 1990s will be in the market for owner-occupied housing. Immigrants and other minorities—who accounted for nearly 40 percent of the growth in the nation's homeownership rate over the past five years—will be responsible for almost two-thirds of the growth in the number of new households over the next ten years. Non-traditional households have become more important, as overall household formation rates have slowed. With later marriages, divorce, and nontraditional living arrangements, the fastest growing household groups have been single-parent and single-person households. As these demographic factors play out, the overall effect on housing demand will likely be sustained growth and an increasingly diverse household population from which to draw new renters and homeowners. According to the National Association of Homebuilders, annual housing demand will average 1.82 million units over the next decade.

Growth in Single-Family Affordable Lending. Many younger, minority and lower-income families did not become homeowners during the 1980s due to the slow growth of earnings, high real interest rates, and continued house price increases. Over the past ten years, economic expansion, accompanied by low interest rates and increased outreach on the part of the mortgage industry, has improved affordability conditions for these families. As this appendix explains, there has been a "revolution in affordable lending" that has extended homeownership opportunities to historically underserved households. The mortgage industry has offered more customized mortgage products, more flexible underwriting, and expanded outreach to low-income and minority borrowers. Fannie Mae and Freddie Mac have been a big part of this "revolution in affordable lending." HMDA data suggest that the industry and GSE initiatives are increasing the flow of credit to underserved borrowers. Between 1993 and 2002, conventional loans to lowincome and minority families increased at much faster rates than loans to upperincome and non-minority families. Thus, the 1990s and the early part of the current decade have seen the development of a strong affordable lending market.

Disparities in Housing and Mortgage Markets. Despite this strong growth in affordable lending, serious disparities in

the nation's housing and mortgage markets remain. The homeownership rate for African-American and Hispanic households is about 25 percentage points below that of white households. In addition to low income, barriers to homeownership that disproportionately affect minorities and immigrants include: lack of capital for down payment and closing costs; poor credit history; lack of access to mainstream lenders; little understanding of the homebuying process; and, continued discrimination in housing markets and mortgage lending. With respect to the latter, a recent HUD-sponsored study of discrimination in the rental and owner markets found that while differential treatment between minority and white home seekers had declined over the past ten years, it continued at an unacceptable level in the year 2000. In addition, disparities in mortgage lending continued across the nation in 2002, when the loan denial rate for African-American applicants was almost three times that for white applicants, even after controlling for income of the applicant. HUD studies also show that African Americans and Hispanics are subject to discriminatory treatment during the pre-qualification process of applying for a mortgage.

Single-Family Mortgage Market. Heavy refinancing due to low interest rates increased single-family mortgage originations to record levels during 2001–2003. Demographic forces, industry outreach, and low interest rates also kept lending for home purchase at record levels as well. As noted above, the potential homeowner population over the next decade will be highly diverse, as growing demand from immigrants and minorities are expected to sustain the home purchase market, as our population ages. Single-family housing starts are expected to continue in the 1.65–1.70 million range over the next few years. Refinancing of existing mortgages, which accounted for about 65 percent of originations during 2000-2003 is expected to return to more normal levels. As this Appendix explains, the GSEs will continue to play a dominant role in the single-family market and will both impact and be affected by major market developments such as the growth in subprime lending and the increasing use automated underwriting

Multifamily Mortgage Market. The market for financing of multifamily apartments has grown to record volumes. The favorable long-term prospects for apartments, combined with record low interest rates, have kept investor demand for apartments strong and supported property prices. As

explained below, Fannie Mae and Freddie Mac have been among those boosting volumes and introducing new programs to serve the multifamily market. The long run outlook for the multifamily rental market is sustained, moderate growth, based on favorable demographics. The minority population, especially Hispanics, provides a growing source of demand for affordable rental housing. "Lifestyle renters" (older, middle-income households) are also a fast growing segment of the rental population. However, provision of affordable housing will continue to challenge suppliers of multifamily rental housing and policy makers at all levels of governments. Low incomes combined with high housing costs define a difficult situation for millions of renter households. Housing cost reductions are constrained by high land prices and construction costs in many markets. Government action—through land use regulation, building codes, and occupancy standards—are major contributors to those high costs. In addition to fewer regulatory barriers and costs, multifamily housing would benefit from more favorable public attitudes. Higher density housing is a potentially powerful tool for preserving open space, reducing sprawl, and promoting transportation alternatives to

the automobile. The recently heightened attention to these issues may increase the acceptance of multifamily rental construction to both potential customers and their prospective neighbors.

2. Past Performance of the GSEs

This section reviews the low- and moderate-income performance of Fannie Mae and Freddie Mac. It first reviews the GSEs' performance on the Low- and Moderate-Income Goal, then reviews findings from Section E.2 regarding the GSEs' purchases of home loans for historically underserved families and their communities. Finally, it reviews findings from Section G concerning the GSEs' presence in owner and rental markets.

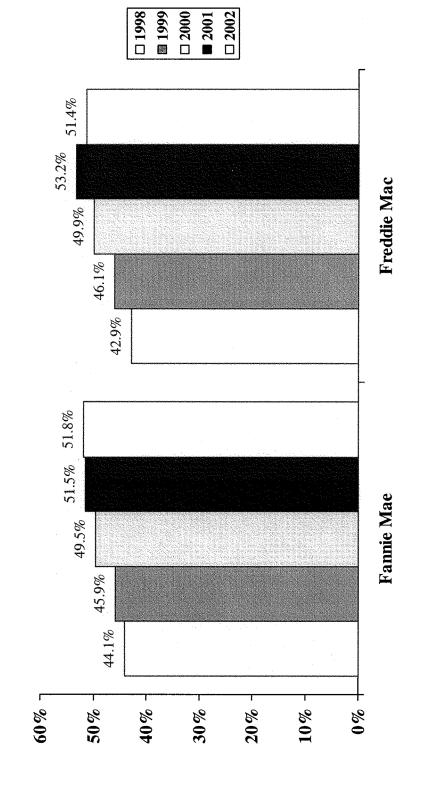
a. Housing Goals Performance

In the October 2000 rule, the low- and moderate-income goal was set at 50 percent for 2001–03. Effective on January 1, 2001, several changes in counting requirements came into effect for the low- and moderate-income goal, as follows: (a) "B.000000000nus points" (double credit) for purchases of mortgages on small (5–50 unit) multifamily properties and, above a threshold level, mortgages on 2–4 unit owner-occupied properties; (b) a "temporary adjustment factor" (1.35

unit credit) for Freddie Mac's purchases of mortgages on large (more than 50 units) multifamily properties; (c) changes in the treatment of missing data; and (d) a procedure for the use of imputed or proxy rents for determining goal credit for multifamily mortgages. Fannie Mae's performance was 51.5 percent in 2001 and 51.8 percent in 2002, and Freddie Mac's performance was 53.2 percent in 2001 and 51.4 percent in 2002; thus both GSEs surpassed this higher goal.

Counting requirements (a) and (b) expired at the end of 2003, while (c) and (d) will remain in effect after that. If this counting approach—without the bonus points and the "temporary adjustment factor" had been in effect in 2000 and 2001, and the GSEs had purchased the same mortgages that they actually did purchase in both years, then Fannie Mae's performance would have been 51.3 percent in 2000, 49.2 percent in 2001, and 49.0 percent in 2002. Freddie Mac's performance would have been 50.6 percent in 2000, 47.7 percent in 2001, and 46.5 percent in 2001. Thus, both Fannie Mae and Freddie Mac would have surpassed the low- and moderate-income goal of 50 percent in 2000 and fallen short in 2001 and 2002. (See Figure A.1.) BILLING CODE 4210-27-P

Low- and Moderate-Income Mortgage Purchases Figure A.1



Low- and Moderate-Income Goal was 42% of units financed for 1998-2000 and 50% for 2001 and 2002. performance in 2001-02 is not strictly comparable with performance in 1998-2000, as discussed Source: HUD analysis of GSEs' loan-level data. Due to changes in goal counting procedures in 2001, in text. b. Single-Family Affordable Lending Market

The GSEs have played a major role in the single-family mortgage market over the past ten years. Their purchases of single-family-owner mortgages accounted for 57 percent of all mortgages originated in the singlefamily conventional conforming market between 1999 and 2002. Their underwriting and purchase guidelines are market standards, used in all segments of the mortgage market. The GSEs have worked to improve their affordable lending record—they have introduced new low-downpayment products targeted at lower-income families; they have customized their underwriting standards to recognize the unique needs of immigrant and minority families; and, they have entered into numerous partnerships with lenders and non-profit groups to reach out to underserved populations. The enterprises' role in the mortgage market is also reflected in their use of cutting edge technology, such as the development of Loan Prospector and Desktop Underwriter, the automated underwriting systems developed by Freddie Mac and Fannie Mae,

respectively. Both GSEs are also entering new and challenging fields of mortgage finance, such as purchasing subprime mortgages.

Despite these efforts and the overall gains in goal performance, the Department remains concerned about the GSEs' support of home lending for the lower-income end of the market and for first-time homebuyers. The lower-income shares of the GSEs' purchases are too low, particularly for underserved groups such as minority first-time homebuyers.

This appendix included a comprehensive analysis of the GSEs' performance in funding home purchase mortgages for families and communities that historically have not been well served by the mortgage market. The following findings are offered with respect to the GSEs' acquisitions of home *purchase loans* that qualify for the three housing goals (special affordable and underserved areas as well as lowand moderate-income) and their acquisitions of first-time homebuyer loans:

• While Fannie Mae and Freddie Mac have both improved their support for the single-family affordable lending market over the past ten years, they have generally lagged the overall conventional conforming market in providing affordable loans to lower-income borrowers and underserved areas. This finding is based on HUD's analysis of GSE and HMDA data and on numerous studies by academics and research organizations.

- The GSEs have shown different patterns of mortgage purchases. Except for two years (1999 and 2000), Fannie Mae has performed better than Freddie Mac since 1993 on all three goalsqualifying categories—low-mod, special affordable, and underserved areas. As a result, the percentage of Freddie Mac's purchases benefiting historically underserved families and their neighborhoods has been less than the corresponding shares of total market originations, while Fannie Mae's purchases have been somewhat closer to the patterns of originations in the primary market.
- The above patterns can be seen by the following percentage shares of home purchase loans that qualified for the three housing goals between 1996 and 2002:

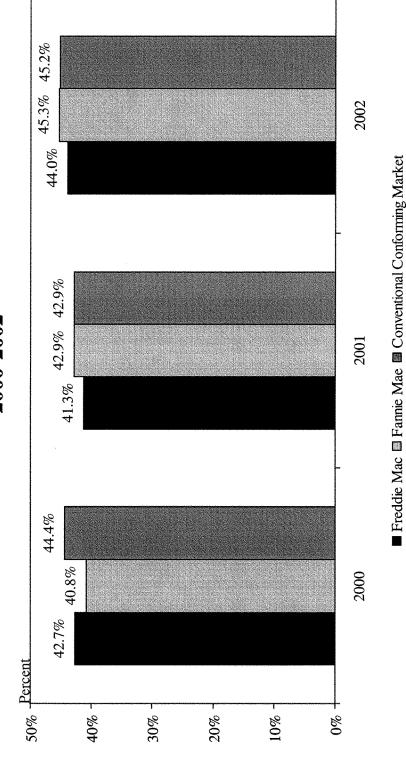
	Special affordable (percent)	Low-mod (percent)	Underserved areas (percent)
Freddie Mac	12.8	39.8	21.7
	13.5	41.2	23.5
	16.0	43.6	25.4

• During 2001 and 2002, Fannie Mae improved its performance enough to reduce its gap in the special affordable and underserved areas markets and to

match the low-mod market. During 2001 and 2002, Freddie Mac lagged the conventional conforming market on all three goals-qualifying categories; see

Figure A.2 for the low- and moderate-income shares for Fannie Mae, Freddie Mac and the market.

Mortgages for Low-and Moderate-Income Borrowers, The Share of GSE and Conventional Conforming 2000-2002 Figure A.2



data reported to HUD. Data are for single-family home purchase loans in metropolitan areas. See Table A.15 for Source: Conforming market (without B&C loans) data are from 2000 and 2001 HMDA; GSE data are from loan-level further explanation.

- Both Fannie Mae and Freddie lag the conventional conforming market in funding first-time homebuyers, and by a rather wide margin. Between 1999 and 2001, first-time homebuyers accounted for 27 percent of each GSE's purchases of home loans, compared with 38 percent for home loans originated in the conventional conforming market.
- The GSEs also account for a very small share of the market for important groups such as minority first-time homebuyers. Considering the total mortgage market (both government and conventional loans), it is estimated that the GSEs purchased only 14 percent of loans originated between 1999 and 2001 for African-American and Hispanic firsttime homebuyers, or one-third of their share (42 percent) of all home purchase loans originated during that period. Considering the conventional conforming market and the same time period, it is estimated that the GSEs purchased only 31 percent of loans originated for African-American and Hispanic first-time homebuyers, or approximately one-half of their share (57 percent) of all home purchase loans in that market.

To summarize, the Department's analysis suggests that the GSEs have not

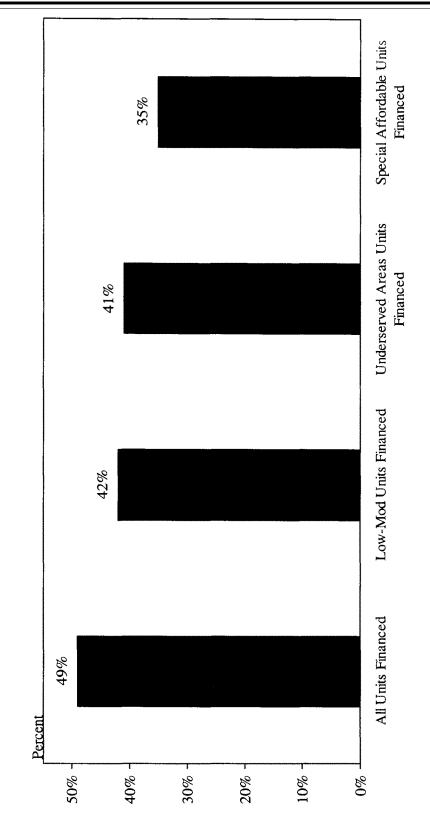
been leading the single-family-owner market in purchasing loans that qualify for the housing goals, although Fannie Mae improved its low-mod and underserved area performance during 2001 and 2002 to approach the market in funding special affordable and underserved areas loans and to match the market in funding low- and moderate-income loans. Still, there is room for both Fannie Mae and Freddie Mac to further improve their performance in purchasing affordable loans at the lower-income end of the market, particularly in the minority first-time homebuyer market. Evidence suggests that there is a significant population of potential homebuyers who might respond well to aggressive outreach by the GSEs-immigrants and minorities, in particular, are expected to be a major source of future homebuyers. Furthermore, studies indicate the existence of a large untapped pool of potential homeowners among the rental population. Indeed, the GSEs' recent experience with new outreach and affordable housing initiatives is important confirmation of this potential. To move the GSEs into a leadership position, the Department is establishing

three subgoals for home purchase loans that qualify for the three housing goals. The low- and moderate-income subgoal is discussed in Section I.3 below.

c. Overall Market Shares

This appendix also included an analysis of the GSEs' role in the overall (owner and rental) conventional conforming mortgage market. While GSE mortgage purchases represented 49 percent of total dwelling units financed between 1999 and 2002, they represented smaller shares of the three goals-qualifying markets: 42 percent of housing units financed for low- and moderate-income families; 41 percent of newly-mortgaged units in underserved areas; and 35 percent of units financed for the very-low-income and other families that qualify as special affordable. (See Figure A.3.) In other words, the GSEs accounted for approximately 40 percent or less of the single-family and multifamily units financed in the goals-qualifying markets. This market share analysis suggests that there is room for the GSEs to increase their purchases in these goals-qualifying markets.

GSEs' Share of the Conventional Conforming Market by Housing Goal Category, 1999-2002 Figure A.3



Source: The conventional conforming market, as estimated by HUD, includes single-family owner, single-family rental, and multifamily units financed during 1999-2002. See notes for Table A.30.

The market analysis also examined the GSEs' presence in the three major property sectors of the mortgage market: Single-family owner (a 57 percent share for the GSEs between 1999 and 2002), single-family rental (a 27 percent share), and multifamily (a 30 percent share). The GSEs have historically played a minimal role in the market financing single-family rental properties, which is an important source of low-income rental housing. Fannie Mae and Freddie Mac have increased their purchases of these mortgages, but their purchases totaled only 27 percent of the singlefamily rental units that received financing between 1999 and 2002. A further increased presence by Fannie Mae and Freddie Mac would bring lower interest rates and liquidity to this market, as well as improve their housing goals performance.

d. The GSEs' Purchases of Multifamily Mortgages

Fannie Mae and, especially, Freddie Mac have rapidly expanded their presence in the multifamily mortgage market in the period since the passage of FHEFSSA. The Senate report on this legislation in 1992 referred to the GSEs' activities in the multifamily arena as "troubling," citing Freddie Mac's September 1990 suspension of its purchases of new multifamily mortgages and criticism of Fannie Mae for 'creaming" the market.304

Freddie Mac has successfully rebuilt its multifamily acquisition program, as shown by the increase in its purchases of multifamily mortgages: From \$27 million in 1992 to \$3 billion in 1997 and then to approximately \$7 billion during the next three years (1998 to 2000), before rising further to \$11.9 billion in 2001 and \$13.3 billion in 2002. Multifamily properties accounted for over 9 percent of all dwelling units (both owner and rental) financed by Freddie Mac during 2000 and 2001, and for 7 percent during the heavy refinancing year of 2002. Concerns regarding Freddie Mac's multifamily capabilities no longer constrain their performance with regard to low- and moderate-income families.

Fannie Mae never withdrew from the multifamily market, but it has also stepped up its activities in this area substantially, with multifamily purchases rising from \$3.0 billion in 1992 to \$9.4 billion in 1999, \$18.7 billion in 2001, and \$18.3 billion in 2002. Multifamily units as a share of all dwelling units (both owner and rental) financed by Fannie Mae varied in the 10-13 percent range between 1999 and

2001, before falling to 7.3 percent during heavy refinancing year of 2002.

The increased purchases of multifamily mortgages by Fannie Mae and Freddie Mac have major implications for the Low- and Moderate-Income Housing Goal, since a very high percentage of multifamily units have rents which are affordable to low- and moderate-income families. However, the potential of the GSEs to lead the multifamily mortgage industry has not been fully developed. As reported earlier in Table A.30, the GSEs' purchases between 1999 and 2002 accounted for only 30 percent of the multifamily units that received financing during this period. Certainly there are ample opportunities and room for expansion of the GSEs' share of the multifamily mortgage market. The GSEs' size and market position between loan originators and mortgage investors makes them the logical institutions to identify and promote needed innovations and to establish standards that will improve market efficiency. As their role in the multifamily market continues to grow, the GSEs will have the knowledge and market presence to push simultaneously for standardization and for programmatic flexibility to meet special needs and circumstances, with the ultimate goal of increasing the availability and reducing the cost of financing for affordable and other multifamily rental properties.

3. Ability To Lead the Single-Family-Owner Market: A Low- and Moderate-Income Subgoal

As discussed in Section E, the Department is proposing to establish a subgoal of 45 percent for each GSE's purchases of home purchase loans for low- and moderate-income families in the single-family-owner market of metropolitan areas for 2005, with the subgoal rising to 46 percent in 2006 and 47 percent in 2007 and 2008. The purpose of this subgoal is to encourage the GSEs to improve their acquisitions of home purchase loans for lowerincome families and first-time homebuyers who are expected to enter the homeownership market over the next few years. If the GSEs meet this goal, they will be leading the primary market by approximately one percentage point in 2005 and by three percentage points in 2007 and 2008, based on the income characteristics of home purchase loans reported in HMDA. Between 1999 and 2002 (2000 and 2002), HMDA data show that low- and moderate-income families accounted for an average of 44.3 (44.2) percent of single-family-owner loans originated in the conventional conforming market of

metropolitan areas. Loans in the B&C portion of the subprime market are not included in these averages. To reach the 45-percent (47 percent) subgoal for 2005 (for 2007-08), both GSEs would have to improve their historical performance'Fannie Mae by 0.8 percentage points (2.8 percentage points) over its average performance of 44.2 percent in 2001 and 2002, and Freddie by 2.4 percentage points (4.4 percentage points) over its average performance of 42.6 percent during the same period.

As explained in Section E.9.f, HUD will be re-benchmarking its median incomes for metropolitan areas and nonmetropolitan counties based on 2000 Census median incomes, and will be incorporating the effects of the new OMB metropolitan area definitions. HUD projected the effects of these two changes on the low- and moderateincome shares of the single-familyowner market for the years 1999–2002. These estimates will be referred to as 'projected data" while the 1990-based data reported above will be referred to as "historical data." The average lowmod share of the home purchase market (without B&C loans) was 43.1 percent based on projected data, as compared with 44.3 percent based on historical data. Thus, based on projected data, the 45-percent (47-percent) subgoal is approximately two (four) percentage points above the 1999–2002 market average. Fannie Mae's average low-mod performance between 1999 and 2002 based on the projected data was 41.4 percent, compared with 42.5 percent based on historical data. To reach the 45-percent subgoal for 2005 based on projected data, Fannie Mae would have to improve its performance by 2.3 percentage points over its projected average performance of 42.7 percent in 2001 and 2002, or by 1.4 percentage points over its projected 2002 low-mod performance of 43.6 percent. Freddie Mac's average low-mod performance between 1999 and 2002 based on the projected data was 40.9 percent, compared with 42.3 percent based on historical data. To reach the 45-percent subgoal for 2005 based on projected data, Freddie Mac would have to improve its performance by 4.0 percentage points over its projected average performance of 41.0 percent in 2001 and 2002, or by 2.9 percentage points over its projected 2002 low-mod performance of 42.1 percent.

The approach taken is for the GSEs to obtain their leadership position by staged increases in the low-mod subgoal; this will enable the GSEs to take new initiatives in a correspondingly staged manner to

³⁰⁴ Senate Report 1023-282, May 15, 1992, p. 36.

achieve the new subgoal each year.
Thus, the increases in the low-mod subgoal are sequenced so that the GSEs can gain experience as they improve and move toward the new higher subgoal torgets.

subgoal targets.

As explained in Section E.9, the subgoal applies only to the GSEs' purchases in metropolitan areas because the HMDA-based market benchmark is only available for metropolitan areas. The Department is also setting subgoals for the other two goals-qualifying categories, as follows: 17 percent for special affordable loans and 33 percent for loans in underserved areas.

The Department considered the following factors when setting the subgoal for low- and moderate-income

loans.

(a) The GSEs have the ability to lead the market. The GSEs have the ability to lead the primary market for singlefamily-owner loans, which is the "bread-and-butter" of their business. They both have substantial experience in this market, which means there are no issues as whether or not the GSEs have yet penetrated the market, as there are with the single-family rental and multifamily markets. Both GSEs have not only been operating in the owner market for years, they have been the dominant players in that market, funding 57 percent of the single-familyowner mortgages financed between 1999 and 2002. As discussed in Section G, their underwriting guidelines are industry standards and their automated mortgage systems are widely used throughout the mortgage industry. Through their new downpayment and subprime products, and their various partnership initiatives, the GSEs have shown that they have the capacity to reach out to lower-income families seeking to buy a home. Both Fannie Mae and Freddie Mac have the staff expertise and financial resources to make the extra effort to lead the primary market in funding single-family-owner mortgages for low- and moderateincome mortgages, as well for special affordable and undeserved area mortgages.

(b) The GSEs have lagged the market. Even though the GSEs have the ability to lead the market, they have lagged the market under the housing goals. The Department and independent researchers have published numerous studies examining whether or not the GSEs have been leading the single-family market in terms of funding loans that qualify for the three housing goals. While the GSEs, and particularly Fannie Mae, have significantly improved their performance over the past two years, they have lagged the primary market in

funding goals-qualifying loans during the period that they have operated under the current definitions of HUD's housing goals. Between 1996 and 2002 (1999 and 2002), low- and moderateincome mortgages accounted for 39.8 (42.3) percent of Freddie Mac's purchases, 41.2 (42.5) percent of Fannie Mae's purchases, and 43.6 (44.3) percent of primary market originations (without B&C loans). The type of improvement needed to meet this new low-mod subgoal was demonstrated by Fannie Mae during 2001 and 2002, as Fannie Mae increased its low-mod purchases from 40.8 percent of its single-familyowner business in 2000 to 45.3 percent in 2002 (or from 40.1 percent in 2000 to 43.6 percent in 2002 based on projected

(c) Disparities in Homeownership and Credit Access Remain. There remain troublesome disparities in our housing and mortgage markets, even after the "revolution in affordable lending" and the growth in homeownership that has taken place since the mid-1990s. The homeownership rate for African-American and Hispanic households remains 25 percentage points below that of white households. Minority families face many barriers in the mortgage market, such as lack of capital for down payment and lack of access to mainstream lenders (see above). Immigrants and minorities are projected to account for almost two-thirds of the growth in the number of new households over the next ten years. As emphasized throughout this Appendix, changing population demographics will result in a need for the primary and secondary mortgage markets to meet nontraditional credit needs, respond to diverse housing preferences and overcome information and other barriers that many immigrants and minorities face. The GSEs have to increase their efforts in helping these families because so far they have played a surprisingly small role in serving minority first-time homebuyers. It is estimated that the GSEs accounted for 46.5 percent of all (both government and conventional) home loans originated between 1999 and 2001; however, they accounted for only 14.3 percent of home loans originated for African-American and Hispanic first-time homebuyers. Within the conventional conforming market, it is estimated that the GSEs purchased only 20 percent of loans originated for African-American and Hispanic firsttime homebuyers, even though they accounted for 57 percent of all home purchase loans in that market. A subgoal for home purchase loans should increase the GSEs' efforts in important

sub-markets such as the one for minority first-time homebuyers.

(d) There are ample opportunities for the GSEs to improve their performance. Low- and moderate-income loans are available for the GSEs to purchase. which means they can improve their performance and lead the primary market in purchasing loans for borrowers with less-than-median income. Three indicators of this have already been discussed. First, Sections B and C of this appendix and Appendix D explain that the affordable lending market has shown an underlying strength over the past few years that is unlikely to vanish (without a significant increase in interest rates or a decline in the economy). The low-mod share of the home purchase market has averaged 43.6 percent since 1996 and annually has ranged from 42.2 percent to 45.2 percent. Second, the market share data reported in Table A.30 of Section G demonstrate that there are newlyoriginated loans available each year for the GSEs to purchase. The GSEs purchases of single-family owner loans represented 57 percent of all singlefamily-owner loans originated between 1999 and 2002, compared with 53 percent of the low-mod loans that were originated during this period. Thus, almost one-half of the low-mod conforming market is not touched by the GSEs. As noted above, the situation is even more extreme for special submarkets such the minority first-time homebuyer market where the GSEs have only a minimal presence. Finally, the GSEs' purchases under the subgoal are not limited to new mortgages that are originated in the current calendar year. The GSEs can purchase loans from the substantial, existing stock of affordable loans held in lenders' portfolios, after these loans have seasoned and the GSEs have had the opportunity to observe their payment performance. In fact, based on Fannie Mae's recent experience, the purchase of seasoned loans appears to be one useful strategy for purchasing goals-qualifying loans.

To summarize, although single-family-owner mortgages comprise the "bread-and-butter" of the GSEs' business, evidence presented above demonstrates that the shares of their loans for low- and moderate-income families lag the corresponding shares for the primary market. For the reasons given above, the Secretary believes that the GSEs can do more to raise the low-and moderate-income shares of their mortgages on these properties. This can be accomplished by building on various programs that the enterprises have already started, including (1) their partnership and outreach efforts, (2)

their incorporation of greater flexibility into their underwriting guidelines, (3) their purchases of CRA loans, and (4) their targeting of important markets where they have had only a limited presence in the past, such as the market for minority first-time homebuyers. A wide variety of quantitative and qualitative indicators indicate that the GSEs' have the resources and financial strength to improve their affordable lending performance enough to lead the market for low- and moderate-income

4. Size of the Mortgage Market for Lowand Moderate-Income Families

As detailed in Appendix D, the lowand moderate-income mortgage market accounts for 51 to 57 percent of dwelling units financed by conventional conforming mortgages. In estimating the size of the market, HUD excluded the effects of the B&C market. HUD also used alternative assumptions about future economic and market affordability conditions that were less favorable than those that existed over the last five years. HUD is well aware of the volatility of mortgage markets and the possible impacts of changes in economic conditions on the GSEs' ability to meet the housing goals. Should conditions change such that the goals are no longer reasonable or feasible, the Department has the authority to revise the goals.

5. The Low- and Moderate-Income Housing Goal for 2005–2008.

The proposed Low- and Moderate-Income Housing Goal is 52 percent of eligible units for 2005, 53 percent for 2006, 55 percent for 2007, and 57 percent for 2008. It is recognized that neither GSE met these proposed goals in 2001 and 2002. However, the market for the Low- and Moderate-Income Goal is estimated to be 51–57 percent. Under the new counting rules (i.e., 2000-Census income re-benchmarking and the new OMB metropolitan area definitions), Fannie Mae's low- and moderate-income performance is estimated to have been 46.3 percent in 1999, 51.2 percent in 2000, 48.7 percent in 2001, and 47.9 percent in 2002-for 2005, Fannie Mae would have to increase its performance by 3.5 percentage points over its average (unweighted) performance of 48.5 percent over these last four years, or by 0.8 percentage point over its previous peak performance (51.2 percent in 2000). By 2008, Fannie Mae's performance would have to increase by 8.5 percentage points over average 1999–2002 performance, and by 5.8 percentage points over its previous peak

performance in 2000. Freddie Mac's performance is estimated to have been 46.0 percent in 1999, 50.2 percent in 2000, 47.0 percent in 2001, and 45.0 percent in 2002—for 2005, Freddie Mac would have to increase its performance by 4.9 percentage points over its average (unweighted) performance of 47.1 percent over these last four years, or by 1.8 percentage points over its previous peak performance (50.2 percent in 2000). By 2008, Freddie Mac's performance would have to increase by 9.9 percentage points over average 1999-2002 performance, and by 6.8 percentage points over its previous peak performance. However, the low- and moderate-income market is estimated to be 51–57 percent. Thus, the GSEs should be able to improve their performance enough to meet these proposed goals of 52-57 percent.

The objective of HUD's proposed Low- and Moderate-Income Goal is to bring the GSEs' performance to the upper end of HUD's market range estimate for this goal (51–57 percent), consistent with the statutory criterion that HUD should consider the GSEs ability to lead the market for each Goal. To enable the GSEs to achieve this leadership, the Department is proposing modest increases in the Low- and Moderate-Income Goal for 2005 which will increase further, year-by-year through 2008, to achieve the ultimate objective for the GSEs to lead the market under a range of foreseeable economic circumstances by 2008. Such a program of staged increases is consistent with the statutory requirement that HUD consider the past performance of the GSEs in setting the Goals. Staged annual increases in the Low- and Moderate-Income Goal will provide the enterprises with opportunity to adjust their business models and prudently try out business strategies, so as to meet the required 2008 level without compromising other business objectives and requirements.

Figure A.3 summarizes many of the points made in this section regarding opportunities for Fannie Mae and Freddie Mac to improve their overall performance on the Low- and Moderate-Income Goal. The GSEs' purchases provided financing for 23,580,594 (or 49 percent) of the 48,270,415 single-family and multifamily units that were financed in the conventional conforming market between 1999 and 2002. However, in the low- and moderate-income part of the market, the 11,408,692 units that were financed by GSE purchases represented only 42 percent of the 27,158,020 dwelling units that were financed in the market. Thus, there appears to ample room for the

GSEs to increase their purchases of loans that qualify for the Low- and Moderate-Income Goal. Examples of specific market segments that would particularly benefit from a more active secondary market have been provided throughout this appendix.

6. Conclusions

Having considered the projected mortgage market serving low- and moderate-income families, economic, housing and demographic conditions for 2005-08, and the GSEs' recent performance in purchasing mortgages for low- and moderate-income families, the Secretary has determined that the proposed goals of 52 percent of eligible units financed in 2005, 53 percent in 2006, 55 percent in 2007, and 57 percent in 2008 are feasible. The Secretary is also proposing a subgoal of 45 percent for the GSEs' purchases of single-family-owner home purchase mortgages in metropolitan areas in 2005, increasing to 46 percent in 2006 and 47 percent in 2007 and 2008. The Secretary has considered the GSEs' ability to lead the industry as well as the GSEs financial condition. The Secretary has determined that the proposed goals and the proposed subgoals are necessary and appropriate.

Appendix B—Departmental Considerations To Establish the Central Cities, Rural Areas, and Other Underserved Areas Goal

A. Introduction

1. Establishment of Goal

The Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (FHEFSSA) requires the Secretary to establish an annual goal for the purchase of mortgages on housing located in central cities, rural areas, and other underserved areas (the "Underserved Areas Housing Goal").

In establishing this annual housing goal, Section 1334 of FHEFSSA requires the Secretary to consider:

- 1. Urban and rural housing needs and the housing needs of underserved areas;
- 2. Economic, housing, and demographic conditions;
- 3. The performance and effort of the enterprises toward achieving the Underserved Areas Housing Goal in previous years;
- 4. The size of the conventional mortgage market for central cities, rural areas, and other underserved areas relative to the size of the overall conventional mortgage market;
- 5. The ability of the enterprises to lead the industry in making mortgage credit available throughout the United States, including central cities, rural areas, and other underserved areas; and
- 6. The need to maintain the sound financial condition of the enterprises.

 Organization of Appendix The remaind

Organization of Appendix. The remainder of Section A first defines the Underserved

Areas Housing Goal for both metropolitan areas and nonmetropolitan areas. Sections B and C address the first two factors listed above, focusing on findings from the literature on access to mortgage credit in metropolitan areas (Section B) and in nonmetropolitan areas (Section C). Separate discussions are provided for metropolitan and nonmetropolitan (rural) areas because of differences in the underlying markets and the data available to measure them. Section D discusses the past performance of the GSEs on the Underserved Areas Housing Goal (the third factor) and Sections E-G report the Secretary's findings for the remaining factors. Section H presents the Department's proposals relating to the definition of underserved areas in nonmetropolitan areas. Section I summarizes the Secretary's rationale for establishing a subgoal for singlefamily-owner home purchase mortgages and for setting the level for the Underserved Areas Housing Goal.

2. HUD's Underserved Areas Housing Goal

HUD's definition of the geographic areas targeted by this goal is basically the same as that used during 1996–2003. It is divided into a metropolitan component and a nonmetropolitan component. However, as explained below, switching to 2000 Census geography increases the number of census

tracts defined as underserved, and this necessitates an adjustment of the goal level.

Metropolitan Areas. This rule provides that within metropolitan areas, mortgage purchases will count toward the goal when those mortgages finance properties that are located in census tracts where (1) median income of families in the tract does not exceed 90 percent of area (MSA) median income or (2) minorities comprise 30 percent or more of the residents and median income of families in the tract does not exceed 120 percent of area median income.

In this Rule, the underserved census tracts are defined in terms of the 2000 Census rather than the 1990 Census. As shown in Table B.1a, switching to 2000 Census data and re-specified MSA boundaries as of June 2003, increases the proportions of underserved census tracts, population, owner-occupied housing units, and population below the poverty line in metropolitan areas. The definition now covers 26,959 (51.3 percent) of the 52,585 census tracts in metropolitan areas, which include 48.7 percent of the population and 38.0 percent of the owner-occupied housing units in metropolitan areas. The 1990-based

definition covered 21,587 (47.5 percent) of the 45,406 census tracts in metropolitan areas, which included 44.3 percent of the population and 33.7 percent of the owneroccupied units in metropolitan areas.

The census tracts included in HUD's definition of underserved areas exhibit low rates of mortgage access and distressed socioeconomic conditions. Between 1999 and 2002, the unweighted average mortgage denial rate in these tracts was 17.5 percent, almost double the average denial rate (9.3 percent) in excluded tracts. The underserved tracts include 75.3 percent of the number of persons below the poverty line in metropolitan areas.

BILLING CODE 4210-27-P

tracts. When reporting analysis of mortgage loan denial, origination, and application rates later in this appendix, tracts are excluded if there are no purchase or refinance applications. Tracts are also excluded if: (1) group quarters constitute more than 50 percent of housing units or (2) there are less than 15 home purchase applications in the tract and the tract denial rates equal 0 or 100 percent. Excluded tracts account for a small percentage of mortgage loan applications (1.4 percent). These tracts are not excluded from HUD's underserved areas if they meet the income and minority thresholds. Rather, the tracts are excluded to remove the effects of outliers from the analysis.

¹ This analysis excludes Puerto Rico. In addition, tracts are excluded if median income is suppressed in the underlying census data. There are 379 such

Table B.1a

Changes in Socioeconomic Characteristics of Underserved Areas Between 1990 and 2000 in Metropolitan Areas

	Served Tracts	Underserved Tracts	Total
Census Tracts			
2000 Census (2003 MSAs)	25,626	26,959	52,585
	48.7%	51.3%	100.0%
2000 Census (Pre-2003 MSAs)	24,724	26,317	51,041
	48.4%	51.6%	100.0%
1990 Census	23,819	21,587	45,406
	52.5%	47.5%	100.0%
Population			
2000 Census (2003 MSAs)	119,230,406	113,104,203	232,334,609
	51.3%	48.7%	100.0%
2000 Census (Pre-2003 MSAs)	114,775,427	110,986,684	225,762,111
	50.8%	49.2%	100.0%
1990 Census	110,037,735	87,578,825	197,616,560
	55.7%	44.3%	100.0%
Number of Owner-Occupied Units			
2000 Census (2003 MSAs)	34,665,052	21,284,266	55,949,318
	62.0%	38.0%	100.0%
2000 Census (Pre-2003 MSAs)	33,297,305	20,863,316	54,160,621
	61.5%	38.5%	100.0%
1990 Census	28,218,618	14,353,089	42,571,707
	66.3%	33.7%	100.0%
Population Below Poverty Level Income			
2000 Census (2003 MSAs)	6,650,152	20,288,216	26,938,368
,	24 7%	75.3%	100.0%
2000 Census (Pre-2003 MSAs)	6,331,654	19,755,228	26,086,882
	24 3%	75 7%	100.0%
1990 Census	6,296,693	17,053,610	23,350,303
	27.0%	73.0%	100.0%

Source: 1990 and 2000 Censuses. "2003 MSAs" are based on the Office of Management and Budget's specification of metropolitan area boundaries as of June, 2003. "Pre-2003 MSAs" and "1990 Census" are based on metropolitan area boundaries prior to their re-specification in 2003.

HUD's establishment of this definition is based on a substantial number of studies of mortgage lending and mortgage credit flows conducted by academic researchers, community groups, the GSEs, HUD and other government agencies. As explained in the 2000 Rule, one finding stands out from the existing research literature on mortgage access for different types of neighborhoods: High-minority and low-income neighborhoods continue to have higher mortgage denial rates and lower mortgage origination rates than other neighborhoods. A neighborhood's minority composition and its level of income are highly correlated with access to mortgage credit.

Nonmetropolitan Areas. In nonmetropolitan areas, mortgage purchases count toward the Underserved Areas Housing Goal for properties which are located in counties where (1) median income of families in the county does not exceed 95 percent of the greater of (a) state nonmetropolitan median income or (b) nationwide

nonmetropolitan median income, or (2) minorities comprise 30 percent or more of the residents and median income of families in the county does not exceed 120 percent of the greater of (a) state nonmetropolitan median income or (b) nationwide nonmetropolitan median income.

In 1995, two important factors influenced HUD's definition of nonmetropolitan underserved areas—lack of available data for measuring mortgage availability in rural areas and lenders' difficulty in operating mortgage programs at the census tract level in rural areas. Because of these factors, the 1995 Rule (as well as the 2000 Rule) used a more inclusive, county-based approach to designating underserved portions of rural areas. As discussed in a later section, HUD is now proposing to replace the county-based definition with a tract-based definition.

As shown in Table B.1b, switching from 1990 to 2000 Census data and incorporating the June, 2003 specification of metropolitan areas causes a slight decrease in underserved

proportions of counties, population, owneroccupied housing units, and poverty population in non-metropolitan areas. In terms of the 2000 Census geography and June 2003 metropolitan area specification, the definition covers 1,260 (61.4 percent) of the 2,052 counties in nonmetropolitan areas, which include 51.0 percent of the population, 50.7 percent of the owneroccupied housing units, and 64.3 percent of the population below the poverty level in non-metropolitan areas. The 1990-based definition covered 1,514 (65.5 percent) of the 2,311 counties in non-metropolitan areas, which included 54.6 percent of the population, 53.4 percent of the owneroccupied units, and 67.9 percent of the poor in non-metropolitan areas.2

² Kalawao County, Hawaii, which has a very small population, is excluded from the analysis for 1990 but included for 2000.

Table B.1b

Changes in Socioeconomic Characteristics of Underserved Areas Between 1990 and 2000 in Nonmetropolitan Areas

	Served Counties	Underserved Counties	Total
Counties			
2000 Census (2003 MSAs)	792	1,260	2,052
	38.6%	61.4%	100.0%
2000 Census (Pre-2003 MSAs)	824	1,488	2,312 *
	35.6%	64.4%	100.0%
1990 Census	797	1,514	2,311 *
	34.5%	65.5%	100.0%
Population			
2000 Census (2003 MSAs)	23,941,532	24,899,110	48,840,642
	49.0%	51.0%	100.0%
2000 Census (Pre-2003 MSAs)	25,447,120	29,991,636	55,438,756
	45.9%	54.1%	100.0%
1990 Census	22,838,739	27,467,972	50,306,711
	45.4%	54.6%	100.0%
Number of Owner-Occupied Units			
2000 Census (2003 MSAs)	6,831,437	7,035,123	13,866,560
	49.3%	50.7%	100.0%
2000 Census (Pre-2003 MSAs)	7,194,459	8,459,968	15,654,427
	46.0%	54.0%	100.0%
1990 Census	5,362,989	6,136,455	11,499,444
	46.6%	53.4%	100.0%
Population Below Poverty Level Income			
2000 Census (2003 MSAs)	2,479,803	4,475,024	6,954,827
	35.7%	64.3%	100.0%
2000 Census (Pre-2003 MSAs)	2,598,851	5,207,404	7,806,255
	33.3%	66.7%	100.0%
1990 Census	2,666,613	5,646,582	8,313,195
	32.1%	67.9%	100 0%

Source: 1990 and 2000 Censuses. "2003 MSAs" are based on the Office of Management and Budget's specification of metropolitan area boundaries as of June, 2003. "Pre-2003 MSAs" and "1990 Census" are based on metropolitan area boundaries prior to their re-specification in 2003.

^{*}Includes 15 partial counties in New England that are split between metropolitan and non-metropolitan areas.

Data comparable to that in Table B.1b is presented in Table B.1c based on census tracts, rather than counties, in nonmetropolitan areas. As indicated, the tract-based definition includes 6,782 (54.9 percent) of the 12,359 nonmetropolitan census tracts in the country. These tracts

contain 52.5 percent of the nonmetropolitan population (comparable to the 51.0 percent using a county-based definition) and 50.4 percent of owner-occupied housing units (close to the corresponding figure of 50.7 percent under the county-based approach). But the tract-based approach better targets

families most in need, as shown, for example, by the fact that it includes 68.9 percent of the population in poverty, exceeding the corresponding figure of 64.3 percent under the county-based definition of nonmetropolitan underserved areas.

Table B.1c

Socioeconomic Characteristics of Tract-Based
Underserved Areas in Non-Metropolitan Areas

	Served Tracts	Underserved Tracts	Total
Tracts			
2000 Census (2003 MSAs)	5,577	6,782	12,359
	45.1%	54.9%	100.0%
Population			
2000 Census (2003 MSAs)	23,181,465	25,659,177	48,840,642
	47.5%	52.5%	100.0%
Number of Owner-Occupied Units			
2000 Census (2003 MSAs)	6,874,464	6,992,096	13,866,560
	49.6%	50.4%	100.0%
Number of Poor			
2000 Census (2003 MSAs)	2,160,186	4,794,641	6,954,827
·	31.1%	68.9%	100.0%

Source: 2000 Census and the Office of Management and Budget's specification of metropolitan area boundaries as of June, 2003.

GSE Performance. Table B.1d shows the increases in the GSEs' overall goals performance under the more expansive geography of the 2000 Census. During 2000, Fannie Mae's performance would have been an estimated 37.5 percent if underserved areas were defined in terms of 2000 Census geography, compared with 31.0 percent

under 1990 Census geography.
Corresponding 2001 figures (adjusted to be comparable with the 2000 figures) are 35.7 percent and 30.4 percent. The figures for Freddie Mac are 34.1 percent and 29.2 percent for 2000 performance, and 32.5 percent and 28.2 percent for 2001 performance. (The 2001 housing goals

percentages in the table are adjusted to exclude the effects of the bonus points and Freddie Mac's Temporary Adjustment Factor, which became applicable in 2001 for scoring of loans toward the housing goals.)

BILLING CODE 4210–37–P

Table B.1d

Underserved Areas Housing Goal Performance Under 1990 and 2000 Definitions

2000 Mortgage Acquisitions

		Fannie Mae			Freddie Mac	
	1990 Definition	2000 Definition	Change	1990 Definition	2000 Definition	Change
Eligible Units	2,195,320	2,203,666	8,346	1,600,684	1,604,588	3,904
Qualifying Units	680,765	827,185	146,420	466,857	546,488	79,631
Goal Percentage	31.0%	37.5%	6.5%	29.2%	34.1%	4.9%

2001 Mortgage Acquisitions

		Fannie Mae			Freddie Mac	
	1990 Definition	2000 Definition	Change	1990 Definition	2000 Definition	Change
Eligible Units	4,671,585	4,673,222	1,637	3,282,354	3,283,372	1,018
Qualifying Units	1,420,363	1,668,985	248,622	926,399	1,068,328	141,929
Goal Percentage	30 4%	35 7%	5.3%	28.2%	32.5%	4.3%

2002 Mortgage Acquisitions

		Fannie Mae			Freddie Mac	
	1990 Definition	2000 Definition	Change	1990 Definition	2000 Definition	Change
Eligible Units	6,023,704	6,024,497	793	4,320,018	4,320,523	505
Qualifying Units	1,816,281	2,108,766	292,485	1,227,046	1,416,293	189,247
Goal Percentage	30.2%	35.0%	4.9%	28.4%	32.8%	4.4%

[&]quot;1990 Definition" means determination of underserved areas based on 1990 census data and pre-2003 MSA definitions.

[&]quot;2000 Definition" means determination of underserved areas based on 2000 census data, June 2003 MSA definitions, and census tracts as basis of determination in non-metropolitan areas.

Goal and Subgoal Levels. The Department proposes to establish the Underserved Areas Housing Goal as 38 percent of eligible units financed for 2005, 39 percent for 2006 and 2007, and 40 percent for 2008.

HUD is proposing to establish a subgoal of 33 percent for the share of each GSE's total single-family-owner mortgage purchases that finance single-family-owner properties located in underserved census tracts of metropolitan areas for 2005, with this subgoal rising to 34 percent for 2006 and 35 percent for 2007 and 2008. In this case, subgoal performance for a particular calendar year would be calculated for each GSE by dividing (a) the number of mortgages purchased by the GSE that finance singlefamily-owner properties located in underserved areas (i.e., census tracts) of metropolitan areas by (b) the number of mortgages purchased by the GSE that finance single-family-owner properties located in metropolitan areas. As explained in Section H, the purpose of this subgoal is to encourage the GSEs to lead the primary market in funding mortgages in underserved census

B. Consideration of Factors 1 and 2 in Metropolitan Areas: The Housing Needs of Underserved Urban Areas and Housing, Economic, and Demographic Conditions in Underserved Urban Areas

This section discusses differential access to mortgage funding in urban areas and summarizes available evidence on identifying those neighborhoods that have historically experienced problems gaining access to credit. Section B.1 provides an overview of the problem of unequal access to mortgage funding, focusing on discrimination and other housing problems faced by minority families and the communities where they live. Section B.2 examines mortgage access at the neighborhood level and discusses in some detail the rationale for the Underserved Areas Housing Goal in metropolitan areas. The most thorough studies available provide strong evidence that low-income and high-minority census tracts are underserved by the mortgage market. Section B.3 presents recent statistics on the credit characteristics and socioeconomic characteristics of underserved areas under HUD's definition. Readers are referred to the expansive literature on this issue, which is reviewed some detail in Appendix B of HUD's 2000 Rule. This section focuses on some of the main studies and their findings.

Three main points are made in this section:

• Both borrowers and paighborhoods can

- Both borrowers and neighborhoods can be identified as currently being underserved by the nation's housing and mortgage markets. Appendix A provided evidence of racial disparities in the sale and rental of housing and in the provision of mortgage credit. Partly as a result of this, the homeownership rate for minorities is substantially below that for whites.
- The existence of substantial neighborhood disparities in mortgage credit is well documented for metropolitan areas. Research has demonstrated that census tracts with lower incomes and higher shares of minority population consistently have poorer

access to mortgage credit, with higher mortgage denial rates and lower origination rates for mortgages. Thus, the income and minority composition of an area is a good measure of whether that area is being underserved by the mortgage market.

• Research supports a targeted neighborhood-based definition of underservice. Studies conclude that characteristics of mortgage loan applicants and the neighborhood where the property is located are the major determinants of mortgage denial rates and origination rates. Once these characteristics are accounted for, other influences, such as location in a central city, play only a minor role in explaining disparities in mortgage lending.³

1. Discrimination in the Mortgage and Housing Markets—An Overview

The nation's housing and mortgage markets are highly efficient systems, where most homebuyers can put down relatively small amounts of cash and obtain long-term funding at relatively small spreads above the lender's borrowing costs. Unfortunately, this highly efficient financing system does not work everywhere or for everyone. Studies have shown that access to credit often depends on improper evaluation of characteristics of the mortgage applicant and the neighborhood in which the applicant wishes to buy. In addition, though racial discrimination has become less blatant in the home purchase market, studies have shown that it is still widespread in more subtle forms. Partly as a result of these factors, the homeownership rate for minorities is substantially below that of whites. Appendix A provided an overview of the homeownership gaps and lending disparities faced by minorities. This section briefly reviews evidence on lending discrimination as well as a recent HUD-sponsored study of discrimination in the housing market.

Mortgage Denial Rates. A quick look at mortgage denial rates reported by Home Mortgage Disclosure Act (HMDA) data reveals that in 2002 minority denial rates were higher than those for white loan applicants. For lower-income borrowers, the denial rate for African Americans applying for conventional loans was 2.1 times the denial rate for white borrowers, while for higher-income borrowers, the denial rate for African Americans was 2.7 times the rate for white borrowers.

Differentials in denial rates, such as those reported above, are frequently used to demonstrate the problems that minorities face obtaining access to mortgage credit. However, an important question is the degree to which variations in denial rates reflect lender bias against certain kinds of borrowers

relative to the degree to which they reflect the credit quality of potential borrowers (as indicated by applicants' available assets, credit rating, employment history, etc.). Without fully accounting for the creditworthiness of the borrower, racial differences in denial rates cannot be attributed to lender bias. Some studies of credit disparities have attempted to control for credit risk factors that might influence a lender's decision to approve a loan.

Boston Fed Study. The best example of accounting for credit risk is the study of mortgage denial rates by researchers at the Federal Reserve Bank of Boston.⁵ This landmark study found that racial differentials in mortgage denial rates cannot be fully explained by differences in credit risk. To control for credit risk, the Boston Fed researchers included 38 borrower and loan variables indicated by lenders to be critical to loan decisions. For example, the Boston Fed study included a measure of the borrower's credit history, which is a variable not included in other studies. The Boston Fed study found that minorities' higher denial rates could not be explained fully by income and credit risk factors. The denial rate for African Americans and Hispanics was 17 percent, compared with 11 percent for Whites with similar characteristics. That is, African Americans and Hispanics were about 60 percent more likely to be denied credit than Whites, even after controlling for credit risk characteristics such as credit history, employment stability, liquid assets, self-employment, age, and family status and composition. Although almost all highlyqualified applicants were approved, differential treatment was observed among borrowers with more marginal qualifications. That is, highly-qualified borrowers of all races seemed to be treated equally, but in cases where there was some flaw in the application, white applicants seemed to be given the benefit of the doubt more frequently than minority applicants. A subsequent refinement of the data used by the Federal Reserve Bank of Boston confirmed the findings of that study.6

The Boston Fed study, as well as reassessments of that study by other researchers, concluded that the effect of borrower race on mortgage rejections persists even after controlling for legitimate determinants of lenders' credit decisions.⁷

³In this appendix, the term "central city" is used to mean "OMB-designated central city."

⁴The actual denial rates were as follows: 23.6 percent for low-income (80% AMI or less) African Americans, 15.5 percent for upper-income (120% AMI or more) African Americans, 11.4 percent for low-income Whites, and 5.6 percent for upper-income Whites. The overall denial rate in the conventional conforming home purchase market was 9.7 percent in 2002. The data exclude applications to lenders that specialize in manufactured home lending.

⁵ Alicia H. Munnell, Lynn E. Browne, James McEneaney, and Geoffrey M.B. Tootell, "Mortgage Lending in Boston: Interpreting HMDA Data," *American Economic Review*, March 1996.

⁶William C. Hunter, "The Cultural Affinity Hypothesis and Mortgage Lending Decisions," WP–95–8, Federal Reserve Bank of Chicago, 1995. Hunter confirmed that race was a factor in denial rates of marginal applicants. While denial rates were comparable for borrowers of all races with "good" credit ratings, among those with "bad" credit ratings or high debt ratios, minorities were significantly more likely to be denied than similarly-situated whites. The study concluded that the racial differences in denial rates were consistent with a cultural gap between white loan officers and minority applicants, and conversely, a cultural affinity with white applicants.

⁷ For a reassessment of the Boston Fed study, see Stephen Ross and John Yinger, *The Color of Credit,* MIT Press 2002, and other studies cited there.

Thus, these studies imply that variations in mortgage denial rates, such as those reported above, are not determined entirely by borrower risk, but reflect discrimination in the housing finance system. However, the independent race effect identified in these studies is still difficult to interpret. In addition to lender bias, access to credit can be limited by loan characteristics that reduce profitability ⁸ and by underwriting standards that have disparate effects on minority and lower-income borrowers and their neighborhoods. ⁹

Paired-Testing Studies. As discussed in Appendix A, paired testing studies of the pre-qualification process have supported the findings of the Boston Fed study. Based on a review of paired tests conducted by the National Fair Housing Alliance, The Urban Institute concluded that differential treatment discrimination at the preapplication level occurred at significant levels in at least some cities. Minorities were less likely to receive information about loan products, received less time and information from loan officers, and were quoted higher interest rates in most of the cities where tests were conducted. 10 Another Urban Institute study used the paired testing methodology to examine the pre-application process in Los Angeles and Chicago. African Americans and Hispanics faced a significant risk of unequal treatment when they visited mainstream mortgage lending institutions to make preapplication inquiries.11

Sales and Rental Markets. In 2002, HUD released its third Housing iscrimination Study (HDS) in the sale and rental of housing. The study, entitled Discrimination in Metropolitan Housing Markets: National Results from Phase I of the Housing Discrimination Study (HDS), was conducted by the Urban Institute. 12 The results of this HDS were based on 4,600 paired tests of minority and non-minority home seekers conducted during 2000 in 23 metropolitan areas nationwide. The report showed large decreases between 1989 and 2000 in the level of discrimination experienced by Hispanics and African Americans seeking to buy a home. There has also been a modest decrease

in discrimination toward African Americans seeking to rent a unit. This downward trend. however, has not been seen for Hispanic renters, who now are more likely to experience discrimination in their housing search than are African American renters. But while generally down since 1989, the report found that housing discrimination still exists at unacceptable levels. The greatest share of discrimination for Hispanic and African American home seekers can still be attributed to being told units are unavailable when they are available to non-Hispanic whites and being shown and told about fewer units than a comparable non-minority. Although discrimination is down on most areas for African American and Hispanic homebuyers, there remain worrisome upward trends of discrimination in the areas of geographic steering for African Americans and, relative to non-Hispanic whites, the amount of help agents provide to Hispanics with obtaining financing. On the rental side, Hispanics are more likely in 2000 than in 1989 to be quoted a higher rent than their white counterpart for the same unit.

Another HŪD-sponsored study asked respondents to a nationwide survey if they "thought" they had ever been discriminated against when trying to buy or rent a house or an apartment. While the responses were subjective, they are consistent with the findings of the HDS. African Americans and Hispanics were considerably more likely than whites to say they have suffered discrimination—24 percent of African Americans and 22 percent of Hispanics perceived discrimination, compared to only 13 percent of whites.

Segregation in Urban Areas. Discrimination, while not the only cause, contributes to the pervasive level of segregation that persists between African Americans and Whites in our urban areas. The Census Bureau recently released one of the most exhaustive studies of residential segregation ever undertaken, entitled Racial and Ethnic Residential Segregation in the United States: 1980-2000.14 The Census Bureau found that the United States was still very much racially divided. While African Americans have made modest strides, they remain the most highly segregated racial group. The authors said that residential segregation likely results from a variety of factors, including choices people make about where they want to live, restrictions on their choices, or lack of information. The fact that many mainstream lenders do not operate in segregated areas makes it even more difficult for minorities to obtain access to reasonablepriced mortgage credit.15 Section C.8 of

Appendix A cited several studies showing that these inner city neighborhoods are often served mainly by subprime lenders. In addition, there is evidence that denial rates are higher in minority neighborhoods regardless of the race of the applicant. The next section explores the issue of credit availability in neighborhoods in more detail.

2. Evidence About Access to Credit in Urban Neighborhoods—An Overview

HUD's Underserved Areas Housing Goal focuses on low-income and high-minority neighborhoods that are characterized by high loan application denial rates and low loan origination rates. As explained in Section B.3 below, the mortgage denial rate during 2001 in census tracts defined as underserved by HUD was twice the denial rate in excluded (or "served") tracts. In addition to such simple denial rate comparisons, there is a substantial economics literature justifying the targeted neighborhood definition that HUD has used to define underserved areas. Appendix B of the 1995 and 2000 GSE Rules reviewed that literature in some detail; thus, this section simply provides an overview of the main studies supporting the need to improve credit access to low-income and high-minority neighborhoods. Readers not interested in this overview may want to proceed to Section B.3, which examines the credit and socioeconomic characterizes of the census tracts included in HUD's underserved area definition.

As explained in HUD's 2000 Rule, the viability of neighborhoods—whether urban, rural, or suburban-depends on the access of their residents to mortgage capital to purchase and improve their homes. While neighborhood problems are caused by a wide range of factors, including substantial inequalities in the distribution of the nation's income and wealth, there is increasing agreement that imperfections in the nation's housing and mortgage markets are hastening the decline of distressed neighborhoods. Disparate denial of credit based on geographic criteria can lead to disinvestment and neighborhood decline. Discrimination and other factors, such as inflexible and restrictive underwriting guidelines, limit access to mortgage credit and leave potential borrowers in certain areas underserved.

Data on mortgage credit flows are far from perfect, and issues regarding the identification of areas with inadequate access to credit are both complex and controversial. For this reason, it is essential to define 'underserved areas' as accurately as possible based on existing data and evidence. There are three sets of studies that provide the rationale for the Department's definition of underserved areas: (1) Studies examining racial discrimination against individual mortgage applicants; (2) studies that test whether mortgage redlining exists at the neighborhood level; and (3) studies that support HUD's targeted approach to measuring areas that are underserved by the mortgage market. In combination, these studies provide strong support for the definition of underserved areas chosen by HUD. The main studies of discrimination against individuals have already been summarized in Section B.1 above. Thus, this

^{*}Since upfront loan fees are frequently determined as a percentage of the loan amount, lenders are discouraged from making smaller loans in older neighborhoods, because such loans generate lower revenue and are less profitable to lenders.

⁹Traditional underwriting practices may have excluded some lower income families that are, in fact, creditworthy. Such families tend to pay cash, leaving them without a credit history. In addition, the usual front-end and back-end ratios applied to applicants' housing expenditures and other ongoing costs may be too stringent for lower income households, who typically pay larger shares of their income for housing (including rent and utilities) than higher income households.

¹⁰ Margery A. Turner and Felicity Skidmore, eds., Mortgage Lending Discrimination: A Review of Existing Evidence, The Urban Institute: Washington, DC. June 1999.

¹¹ Margery Austin Turner, *All Other Things Being Equal: A Paired Testing Study of Mortgage Lending Institutions*, The Urban Institute Press, April 2002.

¹² Margery Austin Turner, Stephen L. Ross, George Galster, and John Yinger, *Discrimination in Metropolitan Housing Markets*, The Urban Institute Press, November 2002.

¹³ How Much Do We Know? Public Awareness of the Nation's Fair Housing Laws, prepared for HUD by Martin D. Abravanel and Mary K. Cunningham of the Urban Institute, April 2002.

¹⁴U.S. Bureau of the Census, August 2002. The co-authors of the study were John Iceland and Daniel H. Weinberg. For a summary of the study, see "Residential Segregation Still Prevalent," National Mortgage News, January 6, 2003, page 1.

¹⁵ See Randall M. Scheessele, Black and White Disparities in Subprime Mortgage Refinance Lending, Housing Finance Working Paper No. HF– 114, Office of Policy Development and Research, U.S. Department of Housing and Urban Development, April 2002.

section focuses on the neighborhood-based studies in (2) and (3). As noted above, this brief overview of these studies draws from Appendix B of the 1995 GSE Rule; readers are referred there for a more detailed treatment of earlier studies of the issues discussed below.

a. Controlling for Neighborhood Risk and Tests of the Redlining Hypothesis

In its deliberations leading up to FHEFSSA, Congress was concerned about geographic redlining—the refusal of lenders to make loans in certain neighborhoods regardless of the creditworthiness of individual applicants. During the 1980s and early 1990s, a number of studies using HMDA data (such as that reported in Tables B.2 and B.3, below) attempted to test for the existence of mortgage redlining. Consistent with the redlining hypothesis, these studies found lower volumes of loans going to lowincome and high-minority neighborhoods.16 However, such analyses were criticized because they did not distinguish between demand, risk, and supply effects 17—that is, they did not determine whether loan volume was low because families in high-minority and low-income areas were unable to afford homeownership and therefore were not applying for mortgage loans, or because borrowers in these areas were more likely to default on their mortgage obligations, or because lenders refused to make loans to creditworthy borrowers in these areas.1819

More Comprehensive Tests of the Redlining Hypothesis. Recent statistical studies have sought to test the redlining hypothesis by more completely controlling for differences in neighborhood risk and demand. In these studies, the explanatory power of neighborhood race is reduced to the extent that the effects of neighborhood risk and demand are accounted for; thus, they do not support claims of racially induced mortgage redlining. Many of these studies find that the race of the individual borrower is more important than the racial composition of the neighborhood. However, these studies cannot reach definitive conclusions about redlining because segregation in inner cities makes it difficult to distinguish the impacts of geographic redlining from the effects of individual discrimination. The following are two good examples of these studies.

Holmes and Horvitz examined variations in conventional mortgage originations across census tracts in Houston.²⁰ Their model explaining census-tract variations in mortgage originations included the following types of explanatory variables: (a) The economic viability of the loan, (b) characteristics of properties in and residents of the tract (e.g., house value, income, age distribution and education level), (c) measures of demand (e.g., recent movers into the tract and change in owner-occupied units between 1980 and 1990), (d) measures of credit risk (defaults on government-insured loans and change in tract house values between 1980 and 1990), and (e) the racial composition of the tract, as a test for the existence of racial redlining. Most of the neighborhood risk and demand variables were significant determinants of the flow of conventional loans in Houston. The coefficients of the racial composition variables were insignificant, which led Holmes and Horvitz to conclude that allegations of redlining in the Houston market could not be supported.

Schill and Wachter include several individual borrower and neighborhood characteristics to explain mortgage acceptance rates in Philadelphia and Boston.²¹ They found that the applicant race variables—whether the applicant was African American or Hispanic—showed significant negative effects on the probability that a loan would be accepted. Schill and Wachter stated that this finding does not provide evidence of individual race discrimination because applicant race is most likely serving as a proxy for credit risk variables omitted from their model (e.g., credit history, wealth and liquid assets). Schill and Wachter find that when their neighborhood risk proxies are included in the model along with the individual loan variables, the percentage of the census tract that was African American became insignificant. Thus, similarly to Holmes and Horvitz, Schill and Wachter stated that "once the set of independent

variables is expanded to include measures that act as proxies for neighborhood risk, the results do not reveal a pattern of redlining."22

Other Redlining Studies. To highlight the methodological problems of single-equation studies of mortgage redlining, Fred Phillips-Patrick and Clifford Rossi developed a simultaneous equation model of the demand and supply of mortgages, which they estimated for the Washington, DC metropolitan area.23 Phillips-Patrick and Rossi found that the supply of mortgages is negatively associated with the racial composition of the neighborhood, which led them to conclude that the results of singleequation models (such as the one estimated by Holmes and Horvitz) are not reliable indicators of redlining or its absence. However, Phillips-Patrick and Rossi noted that even their simultaneous equations model does not provide definitive evidence of redlining because important underwriting variables (such as credit history), which are omitted from their model, may be correlated with neighborhood race.

A few studies of neighborhood redlining have attempted to control for the credit history of the borrower, which is the main omitted variable in the redlining studies reviewed so far. Samuel Myers, Jr. and Tsze Chan, who studied mortgage rejections in the state of New Jersey in 1990, developed a proxy for bad credit based on the reasons that lenders give in their HMDA reports for denying a loan.24 They found that 70 percent of the gap in rejection rates could not be explained by differences in Black and white borrower characteristics, loan characteristics, neighborhoods or bad credit. Myers and Chan concluded that the unexplained Black-white gap in rejection rates is a result of discrimination. With respect to the racial composition of the census tract, they found that Blacks are more likely to be denied loans in racially integrated or predominantly-white neighborhoods than in predominantly-Black neighborhoods. They concluded that middleclass Blacks seeking to move out of the inner city would face problems of discrimination in the suburbs.25

¹⁶These studies, which were conducted at the census tract level, typically involved regressing the number of mortgage originations (relative to the number of properties in the census tract) on characteristics of the census tract including its minority composition. A negative coefficient estimate for the minority composition variable was often interpreted as suggesting redlining. For a discussion of these models, see Eugene Perle, Kathryn Lynch, and Jeffrey Horner, "Model Specification and Local Mortgage Market Behavior," *Journal of Housing Research*, Volume 4, Issue 2, 1993, pp. 225–243.

¹⁷For critiques of the early HMDA studies, see Andrew Holmes and Paul Horvitz, "Mortgage Redlining: Race, Risk, and Demand," *The Journal of Finance*, Volume 49, No. 1, March 1994, pp. 81–99; and Michael H. Schill and Susan M. Wachter, "A Tale of Two Cities: Racial and Ethnic Geographic Disparities in Home Mortgage Lending in Boston and Philadelphia," *Journal of Housing Research*, Volume 4, Issue 2, 1993, pp. 245–276.

¹⁸ Like early HMDA studies, an analysis of deed transfer data in Boston found lower rates of mortgage activity in minority neighborhoods. The discrepancies held even after controlling for income, house values and other economic and non-racial factors that might explain differences in demand and housing market activity. The study concluded that "the housing market and the credit market together are functioning in a way that has hurt African American neighborhoods in the city of Boston." Katherine L. Bradbury, Karl E. Case, and Constance R. Dunham, "Geographic Patterns of Mortgage Lending in Boston, 1982–1987," New England Economic Review, September/October 1989, pp. 3–30.

¹⁹ Using an analytical approach similar to that of Bradbury, Case, and Dunham, Anne Shlay found evidence of fewer mortgage loans originated in black census tracts in Chicago and Baltimore. See Anne Shlay, "Not in That Neighborhood: The Effects of Population and Housing on the Distribution of Mortgage Finance within the Chicago SMSA," Social Science Research, Volume

^{17,} No. 2, 1988, pp. 137–163; and "Financing Community: Methods for Assessing Residential Credit Disparities, Market Barriers, and Institutional Reinvestment Performance in the Metropolis," *Journal of Urban Affairs*, Volume 11, No. 3, 1989, pp. 201–223.

²⁰ Holmes and Horitz, op. cit.

²¹ Schill and Wachter, op. cit.

²² Schill and Wachter, page 271. Munnell, *et al.* reached similar conclusions in their study of Boston. They found that the race of the individual mattered, but that once individual characteristics were controlled, racial composition of the neighborhood was insignificant.

²³ Fred J. Phillips-Patrick and Clifford V. Rossi, "Statistical Evidence of Mortgage Redlining?" A Cautionary Tale", *The Journal of Real Estate Research*, Volume 11, Number 1, 1996, pp. 13–23.

²⁴ Samuel L. Myers, Jr. and Tsze Chan, "Racial Discrimination in Housing Markets: Accounting for Credit Risk,", *Social Science Quarterly*, Volume 76, Number 3, September 1995, pp. 543–561.

²⁵ For another study that uses HMDA data on reasons for denial to construct a proxy for bad credit, see Steven R. Holloway, "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio", *Annals of the Association of American Geographers*, Volume 88, Number 2, 1998, pp. 252–276. Holloway finds that mortgage denial rates are higher for black applicants (particularly those who are making large loan requests) in all-white neighborhoods that in minority neighborhoods, while the reverse is true for white applicants making small loan requests.

Geoffrey Tootell has authored two papers on neighborhood redlining based on the mortgage rejection data from the Boston Fed study.26 Tootell's studies are important because they include a direct measure of borrower credit history, as well as the other underwriting, borrower, and neighborhood characteristics that are included in the Boston Fed data base; thus, his work does not have the problem of omitted variables to the same extent as previous redlining studies.27 Tootell found that lenders in the Boston area did not appear to be redlining neighborhoods based on the racial composition of the census tract or the average income in the tract. Consistent with the Boston Fed and Schill and Wachter studies, Tootell found that it is the race of the applicant that mostly affects the mortgage lending decision; the location of the applicant's property appears to be far less relevant. However, he did find that the decision to require private mortgage insurance (PMI) depends on the racial composition of the neighborhood. Tootell suggested that, rather than redline themselves, mortgage lenders may rely on private mortgage insurers to screen applications from minority neighborhoods. Tootell also noted that this indirect form of redlining would increase the price paid by applicants from minority areas that are approved by private mortgage insurers.

In a 1999 paper, Stephen Ross and Geoffrey Tootell used the Boston Fed data base to take a closer at both lender redlining and the role of private mortgage insurance (PMI) in neighborhood lending.28 They had two main findings. First, mortgage applications for properties in low-income neighborhoods were more likely to be denied if the applicant did not apply for PMI. Ross and Tootell concluded that their study provides the first direct evidence based on complete underwriting data that some mortgage applications may have been denied based on neighborhood characteristics that legally should not be considered in the underwriting process. Second, mortgage applicants were often forced to apply for PMI when the housing units were in low-income neighborhoods. Ross and Tootell concluded that lenders appeared to be responding to CRA by favoring low-income tracts once PMI has been received, and this effect counteracts the high denial rates for applications without PMI in low-income tracts.

Studies of Information Externalities. Another group of studies related to redlining and the credit problems facing low-income and minority neighborhoods focus on the 'thin' mortgage markets in these neighborhoods and the implications of lenders not having enough information about the collateral and other characteristics of these neighborhoods. The low numbers of house sales and mortgages originated in lowincome and high-minority neighborhoods result in individual lenders perceiving these neighborhoods to be more risky. It is argued that lenders do not have enough historical information to project the expected default performance of loans in low-income and high-minority neighborhoods, which increases their uncertainty about investing in these areas.

This recent group of studies that focus on economies of scale in the collection of information about neighborhood characteristics has implications for the identification of underserved areas and understanding the problems of mortgage access in low-income and minority neighborhoods. William Lang and Leonard Nakamura argue that individual home sale transactions generate information which reduce lenders' uncertainty about property values, resulting in greater availability of mortgage financing.²⁹ Conversely, appraisals in neighborhoods where transactions occur infrequently will tend to be more imprecise, resulting in greater uncertainty to lenders regarding collateral quality, and more reluctance by them in approving mortgage loans in neighborhoods with thin markets. As a consequence, "prejudicial practices of the past may lead to continued differentials in lending behavior.'

If low-income or minority tracts have experienced relatively few recent transactions, the resulting lack of information available to lenders will result in higher denial rates and more difficulty in obtaining mortgage financing, independently of the level of credit risk in these neighborhoods. A number of empirical studies have found evidence consistent with the notion that mortgage credit is more difficult to obtain in areas with relatively few recent sales transactions. Some of these studies have also found that low transactions volume may contribute to disparities in the availability of mortgage credit by neighborhood income and minority composition. Paul Calem found that, in low-minority tracts, higher mortgage loan approval rates were associated with recent sales transactions volume, consistent with the Lang and Nakamura hypothesis.30 While this effect was not found in highminority tracts, he concludes that "informational returns to scale" contribute to disparities in the availability of mortgage credit between low-minority and highminority areas. Empirical research by David Ling and Susan Wachter found that recent tract-level sales transaction volume does significantly contribute to mortgage loan acceptance rates in Dade County, Florida, also consistent with the Lang and Nakamura hypothesis.³¹

Robert Avery, Patricia Beeson, and Mark Sniderman found significant evidence of economies associated with the scale of operation of individual lenders in a neighborhood.32 They concluded that "The inability to exploit these economies of scale is found to explain a substantial portion of the higher denial rates observed in low income and minority neighborhoods, where the markets are generally thin." Low-income and minority neighborhoods often suffer from low transactions volume, and low transactions volume represents a barrier to the availability of mortgage credit by making mortgage lenders more reluctant to approve and originate mortgage loans in these areas. b. Geographic Dimensions of Underserved Areas—Targeted versus Broad Approaches

HUD's definition of metropolitan underserved areas is a targeted neighborhood definition, rather than a broad definition that would encompass entire cities. It also focuses on those neighborhoods experiencing the most severe credit problems, rather than neighborhoods experiencing only moderate difficulty obtaining credit. During the regulatory process leading to the 1995 rule, some argued that underserved areas under this goal should be defined to include all parts of all central cities, as defined by OMB. HUD concluded that such broad definitions were not a good proxy for mortgage credit problems-to use them would allow the GSEs to focus on wealthier parts of cities, rather than on neighborhoods experiencing credit problems. Appendix B of the 1995 and 2000 Rules reviewed findings from academic researchers that support defining underserved areas in terms of the minority and/or income characteristics of census tracts, rather than in terms of a broad definition such as all parts of all central cities. This section briefly reviews two of the studies. The targeted nature of HUD's definition is also examined in Section B.3 below, which describes the credit and socioeconomic characteristics of underserved census tracts.

Shear, Berkovec, Dougherty, and Nothaft conducted an analysis of mortgage flows and application acceptance rates in 32 metropolitan areas that supports a targeted definition of underserved areas.³³ They

²⁶ See Geoffrey M. B. Tootell, "Redlining in Boston: Do Mortgage lenders Discriminate Against Neighborhoods?", *Questerly Journal of Economics*, 111, November, 1996, pp. 1049d–1079; and "Discrimination, Redlining, and Private Mortgage Insurance", unpublished manuscript, October 1995.

²⁷ Tootell notes that both omitted variables and the strong correlation between borrower race and neighborhood racial composition in segregated cities have made it difficult for previous studies to distinguish the impacts of geographic redlining from the effects of individual borrower discrimination. He can unravel these effects because he includes a direct measure of credit history and because over half of minority applicants in the Boston Fed data base applied for mortgages, in predominately white areas.

²⁸ Stephen L. Ross and Geoffrey M. B. Tootell, "Redlining, the Community Reinvestment Act, and Private Mortgage Insurance", unpublished manuscript, March 1999.

²⁹ William W. Lang and Leonard I. Nakamura, "A Model of Redlining," *Journal of Urban Economics*, Volume 33, 1993, pp. 223–234.

³⁰ Paul S. Calem, "Mortgage Credit Availability in Low- and Moderate-Income Minority Neighborhoods: Are Information Externalities Critical?" *Journal of Real Estate Finance and Economics*, Volume 13, 1996, pp. 71–89.

³¹ David C. Ling and Susan M. Wachter, "Information Externalities and Home Mortgage Underwriting," *Journal of Urban Economics*, Volume 44, 1998, pp. 317–332.

³² Robert B. Avery, Patricia E. Beeson, and Mark S. Sniderman, "Neighborhood Information and Home Mortgage Lending," *Journal of Urban Economics*, Volume 45, 1999, pp. 287–310.

³³ William Shear, James Berkovec, Ann Dougherty, and Frank Nothaft, "Unmet Housing Needs: The Role of Mortgage Markets," *Journal of Housing Economics*, Volume 4, 1996, pp. 291–306. These researchers regressed the number of mortgage originations per 100 properties in the census tract on several independent variables that were

found: (a) Low-income census tracts and tracts with high concentrations of African American and Hispanic families had lower rates of mortgage applications, originations, and acceptance rates; and (b) once census tract influences were accounted for, central city location had only a minimal effect on credit flows. These authors recognized that it is difficult to interpret their estimated minority effects—the effects may indicate lender discrimination, supply and demand effects not included in their model but correlated with minority status, or some combination of these factors. Still, they conclude that income and minority status are better indicators of areas with special needs than central city location.

Avery, Beeson, and Sniderman of the Federal Reserve Bank of Cleveland specifically addressed the issue of underserved areas in the context of the GSE legislation.34 Their study examined variations in application rates and denial rates for all individuals and census tracts included in the 1990 and 1991 HMDA data base. These authors found that the individual applicant's race exerts a strong influence on mortgage application and denial rates. African American applicants, in particular, had unexplainably high denial rates. Once individual applicant and other neighborhood characteristics were controlled for, overall denial rates for purchase and refinance loans were only slightly higher in minority census tracts than non-minority census tracts. For white applicants, on the other hand, denial rates were significantly higher in minority tracts. That is, minorities had higher denial rates wherever they attempted to borrow, but whites faced higher denials when they attempt to borrow in minority neighborhoods. In addition, Avery et al. found that home improvement loans had significantly higher denial rates in minority neighborhoods. Given the very strong effect of the individual applicant's race on denial rates, the authors noted that since minorities tend to live in segregated communities, a policy of targeting minority neighborhoods

intended to account for some of the demand and supply (*i.e.*, credit risk) influences at the census tract level. See also Susan Wharton Gates, "Defining the Underserved," *Secondary Mortgage Markets*, 1994 Mortgage Market Review Issue, 1995, pp. 34–48.

may be warranted. They also found that the median income of the census tract had strong effects on both application and denial rates for purchase and refinance loans, even after other variables were accounted for. Avery, Beeson and Sniderman concluded that a tract-level definition is a more effective way to define underserved areas than using the list of OMB-designated central cities as a proxy.

c. Conclusions From the Economics Literature About Urban Underserved Areas

The implications of studies by HUD and others for defining underserved areas can be summarized briefly. First, the existence of large geographic disparities in mortgage credit is well documented. Low-income and high-minority neighborhoods receive substantially less credit than other neighborhoods and fit the definition of being underserved by the nation's credit markets.

Second, researchers are testing models that more fully account for the various risk, demand, and supply factors that determine the flow of credit to urban neighborhoods. The studies by Holmes and Horvitz, Schill and Wachter, and Tootell are examples of this research. Their attempts to test the redlining hypothesis show the analytical insights that can be gained by more rigorous modeling of this issue. However, the fact that urban areas are highly segregated means that the various loan, applicant, and neighborhood characteristics currently being used to explain credit flows are often highly correlated with each other, which makes it difficult to reach definitive conclusions about the relative importance of any single variable such as neighborhood racial composition. Thus, their results are inconclusive, and the need continues for further research on the underlying determinants of geographic disparities in mortgage lending.3

Finally, much research strongly supports a targeted definition of underserved areas. Studies by Shear, *et al.* and Avery, Beeson, and Sniderman conclude that characteristics of both the applicant and the neighborhood where the property is located are the major determinants of mortgage denials and

origination rates—once these characteristics are controlled for, other influences such as central city location play only a minor role in explaining disparities in mortgage lending.

HUD recognizes that the mortgage origination and denial rates forming the basis for the research mentioned in the preceding paragraph, as well as for HUD's definition of underserved areas, are the result of the interaction of individual risk, demand and supply factors that analysts have yet to fully disentangle and interpret. The need continues for further research addressing this problem.

3. Characteristics of HUD's Underserved Areas

a. Credit Characteristics

HMDA data provide information on the disposition of mortgage loan applications (originated, approved but not accepted by the borrower, denied, withdrawn, or not completed) in metropolitan areas. HMDA data include the census tract location of the property being financed and the race and income of the loan applicant(s). Therefore, this is a rich data base for analyzing mortgage activity in urban neighborhoods. HUD's analysis using HMDA data for 2002 shows that high-minority and low-income census tracts have both relatively high loan application denial rates and relatively low loan origination rates.

Table B.2 presents mortgage denial and origination rates by the minority composition and median income of census tracts in metropolitan areas. Two patterns are clear:

- Census tracts with higher percentages of minority residents have higher mortgage denial rates and lower mortgage origination rates than all-white or substantially-white tracts. For example, in 2002 the denial rate for census tracts that are over 90 percent minority (20.2 percent) was 2.4 times that for census tracts with less than 10 percent minority (8.4 percent).
- Census tracts with lower incomes have higher denial rates and lower origination rates than higher income tracts. For example, in 2002 mortgage denial rates declined from 22.7 percent to 6.6 percent as tract income increased from less than 40 percent of area median income to more than 150 percent of area median income.

³⁴ See Avery, et al.

³⁵ Methodological and econometric challenges that researchers will have to deal with are discussed in Mitchell Rachlis and Anthony Yezer, "Serious Flaws in Statistical Tests for Discrimination in Mortgage Markets," *Journal of Housing Research*, Volume 4, 1993, pp. 315–336.

Table B.2

Origination and Denial Rates for Conventional Mortgages

			ations Occupied Ur I Refinances			Denial I (Home Pur		
Minority Percentage	1999	2000	2001	2002	1999	2000	2001	2002
Less than 10%	10.4	7.6	15.5	18.7	10.0 %	11.1 %	9.3 %	8.4 %
10-20	10.7	8.0	16.0	19.7	10.6	11.2	9.3	8.5
20-30	10.9	8.4	16.4	20.4	11.8	12.5	10.3	9.6
30-40	10.4	8.3	15.8	19.8	13.7	14.2	11.8	10.6
40-50	9.9	8.0	14.8	18.7	15.1	16.1	13.4	12.1
50-60	9.9	8.1	14.6	18.5	16.7	17.5	15.0	13.2
60-70	9.6	8.0	14.2	18.0	17.9	19.1	16.5	14.5
70-80	9.2	7.7	13.1	16.9	19.5	21.1	18.2	16.0
80-90	8.7	7.1	11.7	15.2	20.7	22.3	19.6	16.9
90-100	7.0	6.0	8.1	9.8	24.8	26.9	24.2	20.2
All Tracts	10.2	7.8	15.0	18.5	12.7	13.8	11.6	10.5
Tract Income			ations Occupied Ur I Refinances			Denial I (Home Pur		
Relative to MSA Median	1999	2000	2001	2002	1999	2000	2001	2002
Less than 20%	12.0	11.3	16.6	21.0	30.1 %	28.5 %	21.2 %	19.3 %
20-30	8.7	7.8	8.9	9.6	27.8	29.6	26.7	21.6
30-40	8.6	7.7	9.0	10.5	26.9	29.8	27.1	22.7
40-50	8.5	7.5	9.6	11.2	25.9	28.0	26.4	21.6
50-60	8.5	7.4	10.3	12.2	23.2	25.2	23.0	19.1
60-70	8.5	7.1	10.8	12.8	21.1	22.0	19.9	17.0
70-80	8.8	7.2	11.9	14.1	18.4	19.4	17.0	14.9
80-90	9.2	7.3	12.8	15.4	16.1	17.2	14.9	13.0
90-100	9.6	7.4	13.9	16.7	14.1	15.0	12.9	11.5

Source: HUD analysis of 1999, 2000, 2001 and 2002 HMDA and 2000 Census Data, metropolitan area boundaries prior to their re-specification by the Office of Management and Budget in June, 2003. Denial rate data exclude loans of lenders that primarily originate manufactured housing loans. Origination data exclude loans of subprime lenders.

18.6

21.0

22.9

22.3

18.5

12.1

10.4

9.0

7.8

12.7

13.1

11.2

9.6

8.3

13.7

11.1

9.2

7.8

6.8

11.6

10.0

8.6

7.4

6.6

10.5

7.7

8.1

8.6

7.9

7.8

15.2

16.9

18.2

17.2

15.0

10.2

10.9

11.6

11.1

10.2

100-110

110-120

120-150

150+

All Tracts

Table B.3 illustrates the interaction between tract minority composition and tract income by aggregating the data in Table B.2 into nine minority and income combinations. The low-minority (less than 30 percent minority), high-income (over 120 percent of

area median) group had a denial rate of 6.5 percent and an origination rate of 22.7 loans per 100 owner occupants in 2002. The highminority (over 50 percent), low-income (under 90 percent of area median) group had a denial rate of 18.3 percent and an

origination rate of only 13.1 loans per 100 owner occupants. The other groupings fall between these two extremes.

Table B.3

Mortgage Denial and Origination Rates By Minority and Income Characteristics of the Census Tract

Denial Rates (Purchase Mortgages Only)	se Mortgages Onl	[y)		
	Mino	Minority Composition	u	
Tract Income	%0E>	30-20%	50-100%	Total
Less Than 90%	13.2%	13.9%	18.3%	15.6%
90-120%	9.3%	10.5%	14.0%	10.1%
120+	%5'9	%6.8	10.9%	7.1%
Total	8.7%	11.2%	16.3%	10.5%
Origination Rates per 100 Owner Occupants (Purchase and Refinance Mortgages)	100 Owner Occu	spants (Purchase	and Refinance M	(ortgages)
,	Mino	Minority Composition	u	
Tract Income	< 30%	30-20%	50-100%	Total
Less Than 90%	14.2	15.6	13.1	13.9
90-120%	18.6	20.0	17.0	18.6
120+	7.22	24.6	19.8	22.7
Total	19.3	19.3	14.7	18.5

Source: HUD analysis of 2002 HMDA and 2000 Census Data, metropolitan area boundaries prior to exclude loans of subprime lenders and lenders that primarily originate manufactured housing loans. their re-specification by the Office of Management and Budget in June, 2003. Data on denial rates

The advantages of HUD's underserved area definition can be seen by examining the minority-income combinations highlighted in Table B.3. The sharp differences in denial rates and origination rates between the underserved and remaining served categories illustrate that HUD's definition delineates areas that have significantly less success in receiving mortgage credit. In 2002 underserved areas had over one and a half times the average denial rate of served areas (14.0 percent versus 8.9 percent) and three-fourths the average origination rate per 100 owner occupants (16.0 versus 21.4). HUD's

definition does not include high-income (over 120 percent of area median) census tracts even if they meet the minority threshold. The average denial rate (9.9 percent) for high-income tracts with a minority share of population over 30 percent is much less than the denial rate (14.0 percent) in underserved areas as defined by HUD.

Figure B.1 compares underserved and served areas within central cities and suburbs. *First*, Figure B.1 shows that HUD's definition targets central city neighborhoods that are experiencing problems obtaining

mortgage credit. The 15.8 percent denial rate in these neighborhoods in 2002 was almost twice the 8.0 percent denial rate in the remaining areas of central cities. A broad, inclusive definition of "central city" that includes all areas of all central cities would include these "remaining" portions of cities. Figure B.1 shows that these areas, which account for approximately 36 percent of the population in central cities, appear to be well served by the mortgage market. As a whole, they are not experiencing problems obtaining mortgage credit.

■ Underserved ■ Remainder 19.6 Suburbs 13.8 Origination Rate By Central Cities and Suburbs Central Cities 18.4 8.0 Suburbs Denial Rate Central Cities 15.8 Percent 10 25 50 15 2 0

2002 Denial And Origination Rates

Figure B.1

Underserved Areas and Remainder

Second, Figure B.1 shows that HUD's definition also targets underserved census tracts in the suburbs as well as in central cities. The average denial rate in underserved suburban areas (13.7 percent) is 1.7 times that in the remaining served areas of the suburbs (8.0 percent), and is almost as large as the average denial rate (15.8 percent) in underserved central city tracts. Low-income and high-minority suburban tracts appear to have credit problems similar to their central city counterparts. These suburban tracts, which account for 34 percent of the suburban

population, are included in HUD's definition of other underserved areas.

b. Socioeconomic Characteristics

The targeted nature of HUD's definition can be seen from the data presented in Table B.4, which show that families living in tracts within metropolitan areas that are underserved based on HUD's definition experience much more economic and social distress than families living in served areas. For example, the poverty rate in underserved census tracts is 18.5 percent, or over three

times the poverty rate (5.7 percent) in served census tracts. The unemployment rate and the high-school dropout rate are also higher in underserved areas. In addition, there are nearly three times more female-headed households with children in underserved areas (30.0 percent) than in served areas (13.2 percent). Three-fourths of units in served areas are owner-occupied, while only one-half of units in underserved areas are owner-occupied.

Table B.4
Socioeconomic Characteristics of Served and Underserved Tracts in Metropolitan Areas

	Served Tracts	Underserved Tracts	Total
Census Tracts	25,626	26,959	52,585
Households	45,637,698	41,147,058	86,784,756
Population	119,230,406	113,104,203	232,334,609
Unemployment Rate	3.7%	8.0%	5.6%
Poverty Rate*	5.7%	18.5%	11.9%
School Dropout Rate**	10.9%	27.8%	18.8%
Percent Female Households With Children***	13.2%	30.0%	21.2%
Percent African-American	3.9%	22.2%	12.8%
Percent Minority	14.7%	53.5%	33.6%
Homeownership Rate	76.0%	51.8%	64.5%
Percent Renter	24.0%	48.2%	35.5%

Source: 2000 Census.

^{*} Poverty rate is based on population for which poverty rate was determined.

^{**} Dropout rate is for population 25 years and older.

^{***} Percent female households with children is based on households with own children under the age of 18 years.

C. Consideration of Factors 1 and 2 in Nonmetropolitan Areas: The Housing Needs of Underserved Rural Areas and the Housing, Economic, and Demographic **Conditions in Underserved Rural Areas**

Based on discussions with rural lenders in 1995, the definition of underserved rural areas was established at the county level, since such lenders usually do not make distinctions on a census tract basis. A nonmetropolitan county is classified as an underserved area if median income of families in the county does not exceed 95 percent of the greater of state nonmetropolitan or national nonmetropolitan median income, or minorities comprise 30 percent or more of the residents and the median income of families in the county does not exceed 120 percent of the greater of state nonmetropolitan or national nonmetropolitan median income. For nonmetropolitan areas the median income component of the underserved definition is broader than that used for metropolitan areas. While tract income is compared with area income for metropolitan areas, in rural counties income

is compared with the greater of state nonmetropolitan income and national nonmetropolitan income. This is based on HUD's analysis of 1990 census data, which indicated that comparing county nonmetropolitan income only to state nonmetropolitan income would lead to the exclusion of many lower-income lowminority counties from the definition, especially in Appalachia. Based on 1990 census geography, underserved counties account for 57 percent (8,091 of 14,419) of the census tracts and 54 percent of the population in rural areas. By comparison, the definition of metropolitan underserved areas encompassed 47 percent of metropolitan census tracts and 44 percent of metropolitan residents.

The purchasing of loans from underserved areas by the GSEs is intended to induce greater homeownership among moderate, low, very low income, and poor families and minorities. For various reasons, including creditworthiness and lending discrimination, these groups experience greater difficulty in securing loans under fair and reasonable

terms and in buying decent and affordable housing, and it is for them that the geographic goals were designed. The geographic goals, then, are meant to target places where these "underserved" populations live in order to stimulate local mortgage lending and, it is hoped, the availability of credit to those families who reside there who, otherwise, will have difficulty securing credit. This section addresses the basic question of whether and the extent to which HUD's definition of underservice in nonmetropolitan areas effectively targets areas that encompass large populations of socially and economically disadvantaged families.

Table B.5 shows data on demographic and socioeconomic conditions of underserved and served nonmetropolitan areas based on HUD's definition applied at the county level using Census 2000 data. (A later section considers the effects of applying the definition of the census tract level.) Several variables are used to describe area demographic and socioeconomic conditions.

Table B.5

Socioeconomic and Housing Characteristics of Served and Underserved Counties in Nonmetropolitan Areas

	Served Counties	Underserved Counties	Total
Counties	792	1,260	2,052
Households	9,274,968	9,465,054	18,740,022
% Owner-Occupied:	73.7%	74.3%	74.0%
Excluding manufactured housing	73.2%	73.3%	73.2%
Population	23,941,532	24,899,110	48,840,642
% African American	3.3%	13.4%	8.4%
% Hispanic/Latino	3.4%	7.3%	5.4%
% Minority	9.3%	25.8%	17.7%
Unemployment rate	5.2%	7.3%	6.2%
Poverty rate	7.5%	14.5%	11.1%
School dropout rate	18.7%	28.1%	23.5%
Migration rate	8.0%	7.4%	7.7%
Median family income	\$45,000	\$35,421	\$40,100
Median housing value	\$88,099	\$67,358	\$78,756
Purchase affordability	178	183	177
Owner-occupied vacancy rate	2.3%	2.6%	2.4%
Median rent	\$475	\$375	\$425
Rental affordability	197	197	197
Rental vacancy rate	8.8%	10.0%	9.4%
Lacking complete plumbing	1.7%	3.2%	2.5%
Lacking complete kitchen facilities	1.8%	3.2%	0.8%
More than one occupant per room	2.3%	4.3%	3.3%

Source: 2000 Census.

On the national level, a few key results show that the 1995 definition of underservice captures a potentially disadvantaged segment of the population. In examining the minority composition, one can see that the percentage of African Americans, Hispanics/Latinos, and total minority population is higher in underserved nonmetropolitan areas as compared to served nonmetropolitan areas. Overall, the minority population of underserved areas is 25.8 percent as compared with 9.3 percent in served areas. Other supporting results include median family income, poverty rate, unemployment rate, school dropout rate, and in-migration rate. Specifically we find:

- Median income is approximately \$10,000 less in underserved areas than in served areas. This represents an average gap of 25 percent.
- Poverty in underserved areas is twice the rate in served areas (14.5 vs. 7.5 percent).
- Unemployment is 7.3 percent in underserved areas and 5.2 percent in served areas.
- The school dropout rate is 28.1 percent in underserved areas and 18.7 percent in served areas.
- Migration into underserved areas is somewhat lower than in served areas: 7.4 vs. 8.0 percent.

Table B.5 also includes data on homeownership rates, housing affordability, housing quality, and overcrowding. On several of these dimensions, housing conditions and needs in underserved areas are not substantially worse than in served areas. Although housing quality and crowding appear to be marginally worse in underserved areas, homeownership in the two areas is about the same and owning a home actually appears to be more affordable in underserved areas than in served areas. Specific findings include the following:

- Homeownership is slightly higher in underserved than in served nonmetropolitan counties: 74.3 percent vs. 73.7 percent. Removing manufactured homes lowers ownership rates slightly, because ownership of such homes is relatively high, but this does not affect the basic result.
- Owner-occupied and rental vacancy rates are both somewhat higher in underserved areas.
- Median housing unit values are significantly lower in underserved areas: \$67,358 vs. \$88,099.
- The value of a housing affordability index for owner-occupied housing is slightly higher in underserved areas. ³⁶ On average, median income is 1.83 times higher than income required to qualify to buy a home of median value in underserved areas. The comparable factor for served areas is 1.78.
- Rental affordability is approximately the same in underserved and served areas.

- While nearly all housing in served and underserved areas have complete plumbing and kitchens, the percentage of units with incomplete facilities in underserved is twice the percentage in served areas.
- Crowded units are a small share of all housing in nonmetropolitan areas, but the rate is higher for underserved areas: 4.3 vs. 2.3 percent.

Mikesell ³⁷ found using the 1995 American Housing Survey that while the rate of homeownership in nonmetropolitan areas is higher than metropolitan areas, the quality of housing is lower as compared to metropolitan areas. Results based on the 2000 Census show that the homeownership rate for nonmetropolitan areas was 74 percent (73 percent without manufactured homes), and for metropolitan areas it was 64 percent, but both metropolitan and nonmetropolitan areas had approximately 97.5 percent of units with complete plumbing and 99 percent with complete kitchens.

D. Factor 3: Previous Performance and Effort of the GSEs in Connection With the Central Cities, Rural Areas and Other Underserved Areas Goal

Section D.1 reports the past performance of each GSE with regard to the Underserved Areas Housing Goal. Section D.2 then examines the role that the GSEs are playing in funding single-family mortgages in underserved urban neighborhoods based on HUD's analysis of GSE and HMDA data. That section also discusses an underserved area subgoal for home purchase loans. Section D.3 concludes this section with an analysis of the GSEs' purchases in rural (nonmetropolitan) areas.

The increased coverage of the Underserved Areas Housing goal due to switching to 2000 census geography is discussed throughout this section.

1. Past Performance of the GSEs

This section discusses each GSE's performance under the Underserved Areas Housing Goal over the 1996–2002 period. As explained in Appendix A, the data presented are 'official HUD results' which, in some cases, differ from goal performance reported by the GSEs in the Annual Housing Activities Reports (AHARs) that they submit to the Department.

The main finding of this section is that both Fannie Mae and Freddie Mac surpassed the Department's Underserved Areas Housing Goals for each of the seven years during this period. Specifically:

- The goal was set at 21 percent for 1996; Fannie Mae's performance was 28.1 percent and Freddie Mac's performance was 25.0 percent
- The goal was set at 24 percent for 1997–2000. Fannie Mae's performance was 28.8

income needed to qualify for a mortgage on a unit with the median value; and an index number greater than 100 means that a family with the median income has 20 percent more than the level of income needed to qualify for a mortgage on a unit with the median value. The rental affordability index is similarly constructed.

percent in 1997, 27.0 percent in 1998, 26.8 percent in 1999, and 31.0 percent in 2000; and Freddie Mac's performance was 26.3 percent in 1997, 26.1 percent in 1998, 27.5 percent in 1999, and 29.2 percent in 2000.

• In the October 2000 rule, the underserved areas goal was set at 31 percent for 2001-03. As of January 1, 2001, several changes in counting requirements came into effect for the undeserved areas goal, as follows: "bonus points" (double credit) for purchases of goal-qualifying mortgages on small (5–50 unit) multifamily properties and, above a threshold level, mortgages on 2-4 unit owner-occupied properties; a "temporary adjustment factor" (1.20 units credit, subsequently increased by Congress to 1.35 units credit) for Freddie Mac's purchases of goal-qualifying mortgages on large (more than 50-unit) multifamily properties; and eligibility for purchases of certain qualifying government-backed loans to receive goal credit. These changes are explained below. Fannie Mae's performance was 32.6 percent in 2001 and 32.8 percent in 2002. and Freddie Mac's performance was 31.7 percent in 2001 and 31.9 percent in 2002, thus both GSEs surpassed this higher goal in both years. This section discusses the October 2000 counting rule changes in detail below, and provides data on what goal performance would have been in 2001-02 without these changes.39

a. Performance on the Underserved Areas Housing Goal in 1996–2002

HUD's December 1995 rule specified that in 1996 at least 21 percent of the number of units financed by each of the GSEs that were eligible to count toward the Underserved Areas Goal should qualify as units in properties located in underserved areas, and at least 24 percent should qualify in 1997–2000. HUD's October 2000 rule made various changes in the goal counting rules, as discussed below, and increased the Underserved Areas Goal to 31 percent for 2001–03.

Table B.6 shows performance on the underserved areas goal over the 1996-2002 period, based on HUD's analysis. The table shows that Fannie Mae surpassed the goals by 7.1 percentage points and 4.8 percentage points in 1996 and 1997, respectively, while Freddie Mac surpassed the goals by narrower margins, 4.0 and 2.3 percentage points. In 1998 Fannie Mae's performance fell by 1.8 percentage points, while Freddie Mac's performance fell only slightly, by 0.2 percentage point. Freddie Mac showed a gain in performance to 27.5 percent in 1999. exceeding its previous high by 1.2 percentage points. Fannie Mae's performance in 1999 was 26.8 percent, which, for the first time, slightly lagged Freddie Mac's performance in that year.

³⁶The purchase affordability index assesses the extent to which a family with the median income of a given area would be able to afford a housing unit that carries the median purchase price of that area. For example, a purchase affordability index number less than 100 means that a family with the median income would not qualify for a mortgage on a unit with the median value; a purchase affordability index equal to 100 means that a family with the median income has exactly the level of

³⁷J.J. Mikesell, "Housing Problems across Types of rural Households", *Rural Conditions and Trends*, Volume 9, Number 2, pp. 97–101, 1999.

 $^{^{38}}$ Performance for the 1993–95 period was discussed in the October 2000 rule.

³⁹To separate out the effects of changes in counting rules that took effect in 2001, this section also compares performance in 2001 to estimated performance in 2000 if the 2001 counting rules had been in effect in that year.

able B.6

GSEs' Performance on Underserved Areas Goal, 1996-2002

	9661	1997	8661	1999	2000	*1007	2002*
Level of Goal	21%	24%	24%	24%	24%	31%	31%
Fannie Mae: Units Eligible to Count Toward Goal	1,891,896	1,765,346	3,546,302	2,956,155	2,195,320	4,671,585	6,023,704
Underserved Areas Units	532,434	508,746	958,232	791,593	680,765	1,522,726	1,973,735
Percent in Underserved Areas	28.1%	28.8%	27.0%	26.8%	31.0%	32.6%	32.8%
Freddie Mac: Units Eligible to Count Toward Goal	1,325,900	1,180,515	2,658,556	2,245,086	1,600,684	3,282,354	4,320,018
Underserved Areas Units	331,494	310,572	693,747	618,384	466,857	1,042,111	1,375,978
Percent in Underserved Areas	25.0%	26.3%	26.1%	27.5%	29.2%	31.7%	31.9%

* Performance in 2001-2002 not directly comparable with performance in 1996-2000 due to changes in goal counting rules, as discussed in text, and shown in Table B.7.

Both GSEs exhibited sharp gains in goal performance in 2000—Fannie Mae's performance increased by 4.2 percentage points, to a record level of 31.0 percent, while Freddie Mac's performance increased somewhat less, by 1.7 percentage points, which also led to a record level of 29.2 percent. Fannie Mae's performance was 32.6 percent in 2001 and 32.8 percent in 2002; Freddie Mac's performance was 31.7 percent in 2001 and 31.9 percent in 2002. However, as discussed below, using consistent accounting rules for 2000–02, under one method each GSE's performance in 2001–02 was below its performance in 2000.

The official figures for underserved areas goal performance presented above for 1996–2002 are the same as the corresponding figures presented by Freddie Mac in its Annual Housing Activity Reports to HUD for every year except 1999 and 2002, when there was a difference of 0.1 percentage point. The official figures are the same as those presented by Fannie Mae in most years, and differ by 0.1–0.2 percentage point in the other years, reflecting minor differences in the application of counting rules.

Fannie Mae's performance on the underserved areas goal surpassed Freddie Mac's in every year through 1998. This pattern was reversed in 1999, as Freddie Mac surpassed Fannie Mae in goal performance for the first time, though by only 0.7 percentage point. This improved relative performance of Freddie Mac was due to its increased purchases of multifamily loans, as it re-entered that market, and to increases in the goal-qualifying shares of its single-family mortgage purchases. However, Fannie Mae's performance once again exceeded Freddie Mac's performance in 2000, 31.0 percent to 29.2 percent. Fannie Mae's official performance also exceeded Freddie Mac's official performance in 2001-02, despite the fact that Freddie Mac benefited from a

difference in the counting rules applicable to the two GSEs that was enacted by Congress; if the same counting rules were applied to both GSEs, Fannie Mae's performance would have exceeded Freddie Mac's performance by an even greater margin, and in fact Freddie Mac would have just attained the goal, at 31.0 percent, in 2002, and fallen short of the goal in 2001.

b. Changes in the Goal Counting Rules for 2001-03

Several changes in the counting rules underlying the calculation of underserved areas goal performance took effect beginning in 2001. These also applied to the low- and moderate-income goal and are discussed in Appendix A; only brief summaries of those changes are given here:⁴⁰

Bonus points for multifamily and single-family rental properties. Each qualifying unit in a small multifamily property counted as two units in the numerator in calculating performance on all of the goals for 2001–03. And, above a threshold equal to 60 percent of the average number of qualifying rental units financed in owner-occupied properties over the preceding five years, each unit in a 2–4 unit owner-occupied property also counted as two units in the numerator in calculating goal performance.

Freddie Mac's Temporary Adjustment Factor. Freddie Mac received a "Temporary Adjustment Factor" of 1.35 units of credit for each qualifying unit financed in "large" multifamily properties (i.e., those with 51 or more units) in the numerator in calculating its performance on the housing goals for

2001–03.⁴¹ This factor did not apply to units in large multifamily properties in underserved areas whose mortgages were financed by Fannie Mae during this period.

Purchases of certain government-backed loans. Prior to 2001, purchases of government-backed loans were not taken into account in determining performance on the GSEs' low- and moderate-income and underserved area housing goals. As discussed in Appendix A, the 2000 rule established eligibility for FHA-insured home equity conversion mortgages (HECMs) for mortgagors in underserved areas, purchases of mortgages on properties on tribal lands insured under FHA's Section 248 program or HUD's Section 184 program, and purchases of mortgages under the Rural Housing Service's Single Family Housing Guaranteed Loan Program to count toward the underserved area goal.

c. Effects of Changes in the Counting Rules on Goal Performance

Because of the changes in the underserved areas goal counting rules that took effect in 2001, direct comparisons between official goal performance in 2000 and 2001-02 are somewhat of an "apples-to-oranges comparison." For this reason, the Department has calculated what performance would have been in 2000 under the 2001-03 rules; this may compared with official performance in 2001-02—an "apples-to-apples comparison." HUD has also calculated what performance would have been in 2001-02 under the 1996-2000 rules; this may be compared with official performance in 2000—an "oranges-tooranges comparison." These comparisons are presented in Table B.7a.

⁴⁰ Unlike the low- and moderate-income and special affordable goals, there is no exclusion of units from the denominator for units with missing information about the area in which a property is located. That is, such units are counted in the denominator, but not in the numerator, in determining undeserved area goal performance.

⁴¹See *Congressional Record*, December 15, 2000, pp. H12295–96.

Table B.7a

Effects of Counting Rule Changes on the GSEs' Performance on the Underserved Areas Goal

							Technical	
			Technical		Bonus	Bonus Points	Adjustment	
GSE	Year	Baseline A*	Changes	Baseline B*	Small MF ²	SF Rental ³	Factor (TAF) ⁴	Baseline C*
Fannie Mae	1999	26.8%	0.0%	26.8% (31.6%)	0.2%	1.0%	NA	28.1%
	2000	31.0%	0.0%	31.0% (37.5%)	0.2%	1.1%	NA	32.3%
	2001	30.4%	0.0%	30.4% (35.7%)	0.5%	1.7%	NA	32.6%
	2002	30.2%	-0.1%	30.1% (35.0%)	0.8%	1.8%	ΝΑ	32.8%
Freddie Mac	1999	27.5%	0.0%	27.6% (31.6%)	0.1%	0.9%	1.0%	29.6%
	2000	29.2%	0.0%	29.2% (34.1%)	0.1%	0.8%	1.2%	31.4%
	2001	28.2%	0.1%	28.2% (32.5%)	1.3%	1.1%	1.1%	31.7%
	2002	28.4%	0.0%	28.4% (32.8%)	1.0%	1.6%	0.9%	31.8%

Details may not add to total due to rounding.

*Note: Baseline A represents performance under 1996-2000 scoring, thus figures for 1999-2000 in bold are official performance in those years. Baseline B parentheses, scoring of loans in this table is based on 1990 census data, pre-2003 MSAs, and county-based non-metropolitan served and underserved areas. adjusts Baseline A for technical changes in counting rules. Baseline B figures in parentheses are based on 2000 Census data on area median incomes and represents performance under 2001-03 scoring, thus figures for 2001-02 in bold are official performance in those years. Except for Baseline B figures in minority concentrations, the June 2003 specification of metropolitan areas, and tract-based non-metropolitan served and underserved areas. Baseline C

^{&#}x27; Technical changes include credit for purchases of certain qualifying government-backed loans.

² Small multifamily bonus points: For 2001-03, every qualifying unit in a 5-50 unit multifamily property counts as two units in the numerator in calculating goal performance.

³ Single-family rental bonus points: Above a threshold, every qualifying unit in a 2-4 unit property in which one unit is owner-occupied and the other units are rental counts as two units in the numerator in calculating goal performance for 2001-03.

multifamily property counts as 1.35 units in calculating goal performance for Freddie Mac for 2001-03. This provision does not apply to goal 4 Temporary adjustment factor (TAF): In December 2000 Congress enacted a provision whereby every qualifying unit in a large (> 50 unit) performance for Fannie Mae.

Specifically, Table B.7a shows performance under the underserved areas goal in three ways. Baseline A represents the counting rules in effect in 1996–2000. Baseline B incorporates the one minor technical change in counting rules pertaining to the underserved areas goal" eligibility of certain government-backed loans for goals credit. Baseline C incorporates in addition to that technical change the bonus points and, for Freddie Mac, the temporary adjustment factor. Baseline B corresponds to the counting approach proposed in this rule to take effect in 2005. Boldface figures under Baseline A for 1999-2000 and under Baseline C for 2001-02 indicate official goal percentages based on the counting rules in effect in those years' e.g., for Freddie Mac, 27.5 percent in 1999, 29.2 percent in 2000, 31.7 percent in 2001, and 31.8 percent in 2002.

Performance on the Underserved Areas Goal under 1996–2000 Counting Rules Plus Technical Changes. If the "Baseline B" counting approach had been in effect in 2000-02 and the GSEs' had purchased the same mortgages that they actually did purchase in those years, Fannie Mae would have just matched the underserved areas goal in 2000 and fallen short in 2001-02, while Freddie Mac would have fallen short of the goal in all three years, 2000-02. Specifically, Fannie Mae's performance would have been 31.0 percent in 2000, 30.4 percent in 2001, and 30.1 percent in 2002. Freddie Mac's performance would have been 29.2 percent in 2000, 28.2 percent in 2001, and 28.4 percent in 2002.

Performance on the Underserved Areas Goal under 2001-2003 Counting Rules. If the 2001-03 counting rules had been in effect in 2000-02 and the GSEs had purchased the same mortgages that they actually did purchase in those years (i.e., abstracting from any behavioral effects of "bonus points," for example), both GSEs would have surpassed the underserved areas goal in all three years, and both GSEs' performance figures would have increased from 2000 to 2002. Specifically, Fannie Mae's "Baseline C" performance would have been 32.3 percent in 2000, 32.6 percent in 2001, and 32.8 percent in 2002. Freddie Mac's performance would have been 31.4 percent in 2000, 31.7 percent in 2001, and 31.8 percent in 2002. Measured on this consistent basis, then, Fannie Mae's performance increased by 0.3 percentage point in 2001 and 0.2 percentage point in 2002, and Freddie Mac's performance increased by 0.4 percentage point in 2001 and 0.2 percentage point in 2002. These increases were the effect of increased activity in mortgages eligible to receive bonus points between 2000 and 2001-02

Details of Effects of Changes in Counting Rules on Goal Performance in 2001. As discussed above, counting rule changes that took effect in 2001 had significant impacts on the performance of both GSEs on the underserved areas goal in that year—2.4 percentage points for Fannie Mae, and 3.5 percentage points for Fredie Mac. This section breaks down the effects of these changes on goal performance for both GSEs; results are shown in Table B.7a along with figures for other years.

Freddie Mac. The largest impact of the counting rule changes on Freddie Mac's goal performance was due to bonus points for purchases of mortgages on small multifamily properties; this added 1.3 percentage points to goal performance in 2001 and 1.0 percentage points in 2002, as shown in Table B.7. The application of the temporary adjustment factor for purchases of mortgages on large multifamily properties enacted by Congress added 0.9 percentage points to goal performance in 2002. Bonus points for purchase of mortgages on owner-occupied 2-4 unit rental properties also added 1.1 percentage points to performance. Credit for purchases of qualifying government-backed loans played a minor role in determining Freddie Mac's goal performance.

Fannie Mae. The temporary adjustment factor which applied to Freddie Mac's goal performance did not apply to Fannie Mae, thus counting rule changes had less impact on its performance than on Freddie Mac's performance in 2002. The largest impact of the counting rule changes on Fannie Mae's goal performance was due to the application of bonus points for purchases of mortgages on owner-occupied 2-4 unit rental properties, which added 1.8 percentage points to performance, and for purchases of mortgages on small multifamily properties, which added 0.8 percentage point to performance. Credit for purchases of qualifying government-backed loans played a minor role in determining Fannie Mae's goal performance.

d. Bonus Point Incentives for the GSEs' Purchases in Underserved Areas

The Department established "bonus points" for 2001–03 to encourage the GSEs to step up their activity in two segments of the mortgage market the small (5–50 unit) multifamily mortgage market, and the market for mortgages on 2–4 unit properties where 1 unit is owner-occupied and 1–3 units are occupied by renters.

Bonus points for small multifamily properties. Each unit financed in a small multifamily property that qualified for any of the housing goals was counted as two units in the denominator (and one unit in the numerator) in calculating goal performance for that goal.

Fannie Mae financed 37,389 units in small multifamily properties in 2001 that were eligible for the underserved areas goal, an increase of more than 400 percent from the 7,196 units financed in 2000. As explained in Appendix A, small multifamily properties also accounted for a greater share of Fannie Mae's multifamily business in 2001-7.4 percent of total multifamily units financed. up from 2.5 percent in 2000. However, HUD's Housing Goals 2000 Final Rule cited a Residential Finance Survey finding that small multifamily properties account for 37 percent of total units in multifamily mortgaged properties, thus Fannie Mae is still less active in this market than in the market for large multifamily properties.⁴²

Within the small multifamily market, there was some evidence that Fannie Mae targeted properties in underserved areas to a greater

extent in 2001 than in 2000. That is, 56 percent of Fannie Mae's small multifamily units qualified for the underserved areas goal in 2000, but this rose to 64 percent in 2001.

Freddie Mac financed 50,211 units in small multifamily properties in 2001 that were eligible for the underserved areas goal, an increase of more than 1500 percent from the a small base of 2,985 units financed in 2000. Small multifamily properties also accounted for a significantly greater share of Freddie Mac's multifamily business in 2001—16.1 percent of total multifamily units financed, up from 1.8 percent in 2000.

Within the small multifamily market, there was some evidence that Freddie Mac targeted properties in underserved areas to a greater extent in 2001 than in 2000. That is, 61 percent of Freddie Mac's small multifamily units qualified for the underserved areas goal in 2000; this rose to 86 percent in 2001.

Bonus points for single-family rental properties. Above a threshold, each unit financed in a 2-4 unit property with at least one owner-occupied unit (referred to as "OO24s" below) that qualified for any of the housing goals was counted as two units in the denominator (and one unit in the numerator) in calculating goal performance for that goal in 2001-03. The threshold was equal to 60 percent of the average number of such qualifying units over the previous five years. For example, Fannie Mae financed an average of 47,100 underserved area units in these types of properties between 1996 and 2000, and 105,946 such units in 2001. Thus in 2001 Fannie Mae received 77,688 bonus points in this area in 2001—that is, 105,946 minus 60 percent of 47,100. So 183,629 units were entered in the numerator for these properties in calculating underserved area goal performance.

Single-family rental bonus points thus encouraged the GSEs to play a larger role in this market, and also to purchase mortgages on such properties in which large shares of the units qualify for the housing goals. As for small multifamily bonus points, some evidence on the effects of such bonus points on the GSEs' operations may be gleaned from the data provided to HUD by the GSEs for 2001.

Fannie Mae financed 177,872 units in OO24s in 2001 that were eligible for the underserved areas goal, an increase of 116 percent from the 82,464 units financed in 2000. However, Fannie Mae's total singlefamily business increased at approximately the same rate as its OO24 business in 2001, thus the share of its business accounted for by OO24s was the same in 2001 as in 2000—4 percent.

Within the OO24 market, there was no evidence that Fannie Mae targeted affordable properties to a greater extent in 2001 than in 2000. That is, approximately 60 percent of Fannie Mae's OO24 units qualified for the underserved area goal in both 2000 and 2001.

Freddie Mac financed 96,983 units in OO24s in 2001 that were eligible for the underserved areas goal, an increase of 91 percent from the 50,868 units financed in 2000. However, Freddie Mac's total single-family business increased at approximately the same rate as its OO24 business in 2001, thus the share of its business accounted for

^{42 65} FR 65141 & n. 145 (2000).

by OO24s was the same in 2001 as in 2000—3 percent.

As for Fannie Mae, within the OO24 market there was no evidence that Freddie Mac targeted affordable properties to a greater extent in 2001 than in 2000. That is, 60 percent of Fannie Mae's OO24 units qualified for the underserved areas goal in both 2000 and 2001.

e. Effects of 2000 Census on Scoring of Loans Toward the Underserved Areas Housing Goal

Background. Scoring of housing units under the Underserved Areas Housing Goal is based on decennial census data used to identify underserved areas, as follows: For properties in MSAs scoring is based on the median income of the census tract where the property is located, the median income of the MSA, and the percentage minority population in the census tract where the property is located. For properties located outside of MSAs scoring is based on the median income of the county, the median income of the non-metropolitan portion of the State in which the property is located or of the non-metropolitan portion of the United States, whichever has the larger median income, and the percentage minority population in the county where the property is located. Thus, scoring loans under the Underserved Areas Housing Goal requires decennial census data on median incomes for metropolitan census tracts, MSAs, nonmetropolitan counties, the non-metropolitan portions of States, and the non-metropolitan portion of the United States. The determination has been based on 1990 census data through 2004, and beginning in 2005 will be based on 2000 census data.43 44 Under

HUD's proposal, the basis for the determination outside of MSAs will change from counties to census tracts beginning in 2005.

2005 Procedure. Relative to the above procedure, Underserved Areas Housing Goals performance percentages for loans purchased by the GSEs in and after 2005 will be affected by three factors. First, 2000 census data on median incomes and minority populations replace 1990 census data. Second, the Office of Management and Budget in June, 2003, respecified MSA boundaries based on analysis of 2000 census data. Third, the Department's proposed re-specification of the Underserved Areas goal in terms of census tracts rather than counties in nonmetropolitan areas will come into effect. 45 Thus, for properties located outside of MSAs the basis of determination for nonmetropolitan areas will be changed for properties located outside of MSAs to: The median income of the census tract where the property is located; the median income of the non-metropolitan portion of the State in which the property is located or of the nonmetropolitan portion of the United States, whichever is larger; and the percentage minority population in the census tract where the property is located.

in establishing the metropolitan or nonmetropolitan location of a property. The MSA definitions established by the Office of Management and Budget (OMB) in June, 2003 defined MSAs in New England in terms of counties.

Analysis. HUD used 2000 census data to generate underserved area designations for census tracts as defined for the 2000 census with 2003 MSA designations. Because Fannie Mae and Freddie Mac geocoded the mortgages they purchased prior to 2003 based on census tract boundaries as established for the 1990 census, GSE mortgages purchased prior to 2003 can be directly identified as being from a served or underserved area only where the property is located in a 1990-defined census tract whose area consists entirely of whole 2000-defined census tracts, or portions of such tracts, which are all designated either as served or as underserved. In the situation where the area of a 1990-defined census tract includes whole 2000-defined census tracts, or portions of such tracts, some of which are served and some underserved, HUD calculated an "underservice factor" defined as the underserved percentage of the 1990-defined tract's population, based on population data from the 2000 census. 46 These factors were used in estimating underservice percentages for aggregated GSE purchases in and before 2002 based on the 2000 census.

The resulting underserved areas file was used to re-score loans purchased by the GSEs between 1999 and 2002, and was used further in estimating the share of loans originated in metropolitan areas that would be eligible to score toward the Underserved Areas Housing Goal, from HMDA data. The results of the retrospective GSE analysis are provided in Table B.7b. The results of the GSE-HMDA comparative analysis are presented in the next section.

 $^{^{\}rm 43}$ In New England, MSAs were defined through mid-2003 in terms of Towns rather than Counties, and the portion of a New England county outside of any MSA is regarded as equivalent to a county

⁴⁴The procedure used to generate estimated rents in connection with Low- and Moderate Income and Special Affordable Housing Goals, as mentioned in Appendixes A and C, uses similar data series.

 $^{^{\}rm 45}$ HUD has deferred application of the 2000 census data and 2003 MSA designations to 2005, pending completion of the present rulemaking process.

⁴⁶8,717 tracts included both served and underserved area, out of a total of 61,493 tracts that could be classified as served or underserved or assigned an underservice factor.

Table B.7b

Effects of 2000 Census on Scoring Toward Underserved Areas Housing Goal

Benchmark* With 2000 Census Data Adding 2003 MSAs Tracts rather than Counties** Freddie Mac: Benchmark* With 2000 Census Data	26.8%	31.0%	30.4%	30.2%
	32.5%	38.1%	36.6%	35.9%
	32.3%	38.2%	36.4%	35.7%
	31.6%	37.5%	35.7%	35.0%
	27.6%	29.2%	28.2%	28.4%
Adding 2003 MSAs Tracts rather than Counties**	32.4%	34.8% 34.1%	33.3% 33.5% 32.5%	33.5%

* Baseline B in Table B.7a.

** Baseline B figures in parentheses in Table B.7a with tract-based determination of non-metropolitan served and underserved areas. Table B.7b shows four sets of estimates for each GSE, based respectively on the counting rules in place in 2001–2002 (but disregarding the bonus points and Temporary Adjustment Factor), on shifting from 1990 to 2000 census data on median incomes and minority concentrations, on the further addition 2003 MSA specification, and finally on shifting from counties to tracts as the basis for scoring loans in non-metropolitan areas.

2. GSEs' Mortgage Purchases in Metropolitan Neighborhoods

Metropolitan areas accounted for about 85 percent of total GSE purchases under the Underserved Areas Housing Goal in 2001 and 2002. This section uses HMDA and GSE data for metropolitan areas to examine the neighborhood characteristics of the GSEs' mortgage purchases. In subsection 2.a, the

GSEs' performance in underserved neighborhoods is compared with the overall market. This section therefore expands on the discussion in Appendix A, which compared the GSEs' funding of affordable loans with the overall conventional conforming market. A subgoal that the Department is establishing for each GSE's acquisitions of home purchase loans financing properties in the underserved census tracts of metropolitan areas is also discussed subsection 2.a. In subsection 2.b., the characteristics of the GSEs' purchases within underserved areas are compared with those for their purchases in served areas.

a. Comparisons With the Primary Market

Market Comparisons Based on 1990 Census Geography. Section E.8–10 in Appendix A provided detailed information on the GSEs' funding of mortgages for

properties located in underserved neighborhoods for the years 1993 to 2002. To take advantage of historical data going back to 1993, these comparisons were first made using 1990 Census tract geography. The findings with respect to the GSEs' funding of underserved neighborhoods are similar to those reported in Appendix A regarding the GSEs' overall affordable lending performance in the single-family-owner market. While both GSEs improved their performance, they historically lagged the conventional conforming market in providing affordable loans to underserved neighborhoods. The two GSEs themselves engaged in very different patterns of funding-Freddie Mac was less likely than Fannie Mae to fund home loans in underserved neighborhoods, as the following percentage shares for home purchase loans indicate:

Year	Freddie Mac (percent≤)	Fannie Mae (percent≤)	Market (w/o B&C) (percent≤)
1996–2002	21.7	23.5	25.4
1999–2002	22.9	24.0	25.8
2001–2002	24.1	25.6	25.9

Between 1996 and 2002, 21.7 percent of Freddie Mac's purchases financed properties in underserved neighborhoods, compared with 23.5 percent of Fannie Mae's purchases and 25.4 percent of home purchase loans originated in the conventional conforming market (excluding B&C loans). Thus, Freddie Mac performed at only 85 percent of the market (21.7 divided by 25.4), while Fannie Mae performed at 93 percent of the market. Freddie Mac's recent performance has been slightly closer to the market. Over the past four years (1999 to 2002), Freddie Mac performed at 89 percent of the market (22.9 percent for Freddie Mac compared with 25.8 percent for the market), and in 2001 and 2002, the first two years under HUD's higher housing goal targets, at 93 percent of the market (24.1 percent compared with 25.9 percent). (See Tables A.13 to A.16 in Appendix A for complete data going back to

Fannie Mae has funded underserved areas at a higher level than Freddie Mac, as indicated above. And during 2001 and 2002, Fannie Mae average performance was only slightly below the market. The share of Fannie Mae's purchases going to underserved areas was 24.4 percent in 2001 to 26.7 percent in 2002, compared with market levels of 25.2 percent and 26.4 percent,

respectively. However, like Freddie Mac, Fannie Mae's longer-term performance (since 1993 or 1996) as well as its recent average performance (1999 to 2002) has consistently been below market levels. Over the past four years, Fannie Mae performed at 93 percent of the market (24.0 percent for Fannie Mae compared with 25.8 percent for the market). Still, it is encouraging that Fannie Mae significantly improved its performance and closed its gap with the market during the first two years of HUD's higher housing goal levels.

Market Comparisons Based on 2000 Census Geography. As explained in Section A.2 of this appendix, HUD will be defining underserved areas based on 2000 Census data and re-specified metropolitan area boundaries beginning in 2005, the first year covered by the proposed rule. The number of census tracts in metropolitan areas covered by HUD's definition will increase from 21,587 tracts (based on 1990 Census) to 26,959 tracts (based on 2000 Census and new OMB metropolitan area specifications). The increase in the number of tracts defined as underserved means that both GSE performance and the market estimates will be higher than reported above. This section provides an analysis of the performance of the GSEs in the single-family-owner market

based on 2000 census tract geography. For the years 1999, 2000, 2001, and 2002, HUD used the apportionment technique described above involving "underservice factors" to reallocate 1990-based GSE and HMDA data into census tracts as defined by the 2000 Census.

The main results are provided in Table B.8, which compares the GSEs to the market using both the 1990 Census geography and the 2000 Census geography. Switching to the 2000-based tracts increases the underserved area share of market originations by nearly six percentage points. Between 1999 and 2002, 31.5 percent of home purchase mortgages (without B&C loans) were originated in underserved tracts based on 2000 geography, compared with 25.8 percent based on 1990 geography—a differential of 5.7 percentage points. As also shown in Table B.8, the underserved areas share of Fannie Mae's purchases rises by 5.5 percentage points, and the underserved areas share of Freddie Mac's purchases rises by 5.4 percentage points. Thus, the conclusions reported above and in Appendix A about the GSEs' performance relative to the market about remain the same when the analysis is conducted based on 2000 Census geography. BILLING CODE 4210-27-P

Table B.8

Underserved Area Share of GSE Purchases and Mortgage Market Based on 1999-2002 HMDA Data in Metropolitan Areas Under 1990 and 2000 Geography Definitions

Market		Difference	5.5	5.8	5.7	5.9	5.7			5.5	5.7	5.4	5.5	5.4
Conventional Conforming Market	W/O B&C Loans	2000-Based	30.7	32.2	30.9	32.3	31.5			32.4	34.6	30.3	29.8	31.1
Conventio	'n	1990-Based	25.2	26.4	25.2	26.4	25.8	25.4		26.9	28.9	24.9	24.3	25.7 25.5
		Difference	5.3	5.7	5.4	5.6	5.5		oans	5.2	5.4	5.1	5.1	5.2
Loans	Fannie Mae	2000-Based	25.7	29.1	29.8	32.3	29.5		Refinance) L	26.9	30.6	29.3	29.1	29.0
Home Purchase Loans		1990-Based	20.4	23.4	24.4	26.7	24.0	23.5	Total (Home Purchase and Refinance) Loans	21.7	25.2	24.2	24.0	23.8
—		Difference	5.2	5.4	5.1	5.9	5.4		Total (Hom	5.0	5.2	4.8	5.2	5.1
	Freddie Mac	2000-Based	26.1	27.4	27.4	31.7	28.3			28.3	29.8	27.3	28.1	28.2
		1990-Based	20.9	22.0	22.3	25.8	22.9	21.7		23.3	24.6	22.5	22.9	23.1
			6661	2000	2001	2002	1999-02	1996-02 (Estimate)		6661	2000	2001	2002	1999-02 1996-07 (Estimate)

Source: GSE and HMDA data.

It is interesting to repeat the earlier 1990based analysis of home purchase loans but this time based on the 2000 Census geography. The following results are obtained for home purchase loans from Table B.8:

Year	Freddie Mac (percent)	Fannie Mae (percent)	Market (w/o B&C) (percent)
1999	26.1	27.0	31.4
	27.4	29.9	32.9
2001	27.4	30.8	31.6
2002	31.7	32.3	32.3
1999–2002 (average)	28.3	29.5	31.5
1996–2002 (estimate)	27.1	29.0	31.1

Between 1999 and 2002, 28.3 percent of Freddie Mac's purchases and 29.5 percent of Fannie Mae's purchases financed properties in underserved neighborhoods, compared with 31.5 percent home purchase loans originated in the conventional conforming market (excluding B&C loans). Thus, Freddie Mac performed at 90 percent of the market level, while Fannie Mae performed at 94 percent of the market level-both results similar to those reported above for underserved areas based on 1990 Census geography. The 2000-based results also show that Fannie Mae has improved its performance and matched the primary market in funding underserved areas during 2002. The share of Fannie Mae's purchases going to underserved areas increased from 25.7 in 1999 to 32.3 percent in 2002, which placed it at the market level of 32.3 percent. However, the 2000-based results show that, like Freddie Mac, Fannie Mae's longer-term performance (since 1996) as well as its recent average performance (1999 to 2001) have consistently been below market levels. (Note that the 1996-2002 averages reported above are estimated by adding the following 2000-Census versus 1990-Census differentials calculated for 1999-2002: 5.4 percentage points for Freddie Mac, 5.5 for Fannie Mae, and 5.7 for the market.)

Underserved Area Subgoal for Home Purchase Loans. The Department is proposing to establish a subgoal of 33 percent for each GSE's acquisitions of home purchase loans financing single-family-owner properties located in the underserved census tracts of metropolitan areas for 2005, with this proposed subgoal rising to 34 percent for 2006 and 35 percent for 2007–2008. If the GSEs meet this 2005 (2007–2008) subgoal,

they will be leading the primary market by about 1.5 (3.5) percentage points, based on historical data. This *home purchase* subgoal will encourage the GSEs to provide additional credit and capital to urban neighborhoods that historically have not been adequately served by the mortgage industry—but in the future may be the very neighborhoods where the growing population of immigrants and minorities choose to live. As detailed in Section I.5 of this appendix, there are four specific reasons for establishing this subgoal: (1) The GSEs have the expertise, resources, and ability to lead the single-family-owner market, which is their "bread and butter" business; (2) the GSEs have been lagging the primary market in underserved areas, not leading it; (3) the GSEs can help reduce troublesome neighborhood disparities in access to mortgage credit; and (4) there are ample opportunities for the GSEs to expand their purchases in low-income and high-minority neighborhoods. Sections E.9 and G of Appendix A provide additional information on the opportunities for an enhanced GSE role in underserved area segments of the home purchase market and on the ability of the GSEs to lead that market.

As discussed above, underserved areas accounted for an average of 31.5 percent of home purchase loans originated in the conventional conforming market of metropolitan areas (computed over 1999–2002 or over 2001–2002). To reach the proposed 33-percent (35-percent) subgoal for 2005 (2007–2008), both GSEs will have to improve their performance—Fannie Mae by 1.9 (3.9) percentage points over its average performance of 31.1 percent during 2001 and 2002, and by 0.7 (2.7) percentage points over

its performance of 32.3 percent in 2002; and Freddie Mac by 3.4 (5.4) percentage points over its average performance of 29.6 percent in 2001 and 2002, and by 1.3 (3.3) percentage points over its performance of 31.7 percent in 2002. Loans in the B&C portion of the subprime market are excluded from the market average of 31.5 percent for 1999–2001.

The subgoal applies only to the GSEs' purchases in metropolitan areas because the HMDA-based market benchmark is only available for metropolitan areas. HMDA data for non-metropolitan counties are not reliable enough to serve as a market benchmark. The Department is also setting home purchase subgoals for the other two goals-qualifying categories, as explained in Appendices A and C.

b. Characteristics of GSEs' Purchases of Mortgages on Properties in Metropolitan Underserved Areas

Several characteristics of loans purchased in 2002 by the GSEs in metropolitan underserved areas are presented in Table B.9. As shown, borrowers in underserved areas are more likely than borrowers in served areas to be first-time homebuyers, all female, all male and younger than 30. And, as expected, they are more likely to have belowmedian income and to be members of minority groups. For example, first-time homebuyers make up 8.7 percent of the GSEs' mortgage purchases in underserved areas and 6.1 percent of their business in served areas. In underserved areas, 55.1 percent of borrowers had incomes below the area median, compared with 36.7 percent of borrowers in served areas.

Table B.9

Loan and Borrower Characteristics of Single-Family

Mortgages Purchased by the GSEs In Metropolitan Areas, 2002

	Fanni	e Mae	Freddi	e Mac	To	otal
Loan and Borrower Characteristics	Served	Underserved	Served	Underserved	Served	Underserved
Number of Loans	3,461,154	1,100,670	2,538,469	748,885	5,999,623	1,849,555
Loan Purpose						
Home Purchase	30.7 %	37.3 %	27.1 %	33.0 %	29.2 %	35.6 %
Refinancing	69.3	62.7	72.9	67.0	70.8	64.4
Origination Year						
Current Year	81.3 %	76.8 %	81.2 %	76.9 %	81.3 %	76.8 %
Prior Years	18.7	23.2	18.8	23.1	18.7	23.2
Loan-to-Value Ratio						
Over 95%	2.1 %	4.2 %	1.1 %	2.9 %	1.7 %	3.7 %
91-95%	6.1	8.6	6.2	8.5	6.2	8.6
81-90%	10.2	13.5	10.0	15.1	10.1	14.2
61-80%	54.7	53.6	55.3	54.0	55.0	53.7
60% or Less	26.9	20.1	27.3	19.4	27.1	19.8
Income of Borrower(s)						
60% of Area Median or Below	10.3 %	20.6 %	9.2 %	19.8 %	9.8 %	20.2 9
61-100% of Median	27.5	34.8	25.9	35.0	26.8	34.9
Below Area Median	37.8	55.4	35.1	54.7	36.7	55.1
Over 100% of Median	62.2	44.6	64.9	45.3	63.3	44.9
First-time Home Buyer	6.4 %	9.4 %	5.6 %	7.7 %	6.1 %	8.7 %
Race/National Origin of Borrower						
White	85.6 %	64.1 %	85.8 %	71.2 %	85.7 %	66.8 9
African American	2.7	8.7	2.1	6.4	2.4	7.8
Hispanic	4.7	17.2	3.4	11.1	4.2	14.9
Asian or Pacific Islander	4.8	7.6	4.6	6.7	4.7	7.3
American Indian or Alaskan Native	0.4	0.5	0.3	0.4	0.4	0.5
Other	1.7	1.8	3.8	4.3	2.6	2.8
Age of Borrower						
Under 30	9.0 %	11.4 %	7.9 %	10.6 %	8.5 %	11.1 9
30-39	30.9	30.5	29.5	29.3	30.3	30.0
40 and Over	60.2	58.1	62.6	60.1	61.2	58.8
Gender of Borrower(s)						
All Male	21.1 %	27.2 %	19.4 %	25.5 %	20.4 %	26.6 9
All Female	18.6	24.6	15.5	20.7	17.3	23.1
Male and Female	60.4	48.1	65.1	53.8	62.4	50.3

Source: HUD analysis of GSEs' loan-level data on mortgages on owner-occupied one-unit properties. In computing the percentages, missing data are excluded.

Minorities' share of the GSEs' mortgage purchases in underserved areas (33.3 percent) was greater than two times their share in served areas (14.3 percent). And the pattern was even more pronounced for African Americans and Hispanics, who accounted for 22.7 percent of the GSEs' business in underserved areas, but only 6.6 percent of their purchases in served areas.

Fannie Mae and Freddie Mac have different purchasing behavior for home purchases and refinance loans in served and underserved. While Fannie Mae is less likely to purchase refinance mortgages in underserved area than served areas and more like to purchase home purchase loans in served areas than underserved areas, Freddie Mac purchase the same proportion of both home purchase and refinance loans in served areas as in underserved areas.

3. GSE Mortgage Purchases in Nonmetropolitan Areas

There are numerous studies that have evaluated the impact of the GSEs' purchases on metropolitan areas, but few address the impact on nonmetropolitan areas; therefore, our understanding of the GSEs and the nonmetropolitan markets is very limited.

A study of the GSE market share in underserved counties ⁴⁷ found that location

has a role in the accessibility of credit for some people in nonmetropolitan areas (low income, minority, and first-time homebuyers). West North Central counties (Minnesota, Missouri, South Dakota, Iowa, Kansas, Nebraska, and North Dakota) have much lower GSE activity than all other geographic regions, suggesting that the 1995 definition of underservice does not capture the specific characteristics of this region, leading to limited GSE activity.

Additionally, The Urban Institute prepared a report for HUD that investigated the factors influencing GSE activity in nonmetropolitan areas. ⁴⁸ The authors found that Fannie Mae and Freddie Mac have increased their lending to nonmetropolitan areas since 1993; however, there are still weak areas in terms of the percentage of affordable loans being offered. ⁴⁹ They also established that GSE underwriting criteria was not a major barrier in nonmetropolitan areas.

In nonmetropolitan areas, the financial market is often made up of locally owned community banks, manufactured home

Development and Research, Volume 5, 2001, pp. 219–264

⁴⁸ Jeanette Bradley, Noah Sawyer and Kenneth Temkin, *Factors Influencing GSE Service to Rural Areas.* the Urban Institute, prepared for U.S. Department of Housing and Urban Development, 2002.

⁴⁹ Affordable loans are defined as borrowers earning less than 80 percent the Area Median Income.

lenders, and subprime lenders. Industry representatives contacted by the Urban Institute researchers assessed that the barriers nonmetropolitan lenders faced were in the areas of availability of sales comparables, technology, and the type and number of lenders in the area. They also believed that for the GSEs' market share to improve in underserved nonmetropolitan areas, the GSEs would have to begin to build relationships with the community lenders and provide education/training on how to sell loans directly to the GSEs rather than using intermediaries.

a. Effects of 2000 Census Geography

In order to compare served and underserved areas, either in terms of GSE performance or socioeconomic characteristics, it is first necessary to update current geographic (county) designations, which reflect 1990 census median income and minority population data, to reflect newly available 2000 census data. Table B.10 shows the impact on 2000, 2001, and 2002 GSE purchases. These are reported for total GSE purchases and separately for Fannie Mae and Freddie Mac. As above, the results also are shown separately for counties that change classification and those that do not. This analysis is limited to nonmetropolitan areas based on both the pre- and post-June, 2003 OMB metropolitan area designations.

⁴⁷ Heather MacDonald, "Fannie Mae and Freddie Mac in Nonmetropolitan Housing Markets: Does Space Matter?" *Cityscape: A Journal of Policy*

Table B.10

Effects of 2000 Census on Designation of Nonmetropolitan Counties as Served or Underserved

	Basec	Based on 1990 Census Data	Based	Based on 2000 Census Data		Trai	Transition	
	Served	Underserved	Served	Underserved	Remain	Served to Underserved	Underserved to Served	Remain Underserved
Counties	797	1,514	792	1,260	533	93	225	1,151
Percent	34.5	65.5	38.6	61.4	26.6	4.6	11.2	57.5
GSE Purchases, 2000:								
Fannie Mae	131,622	84,099	113,829	66,346	83,313	6,072	17,184	56,414
Percent	61.0	39.0	63.2	36.8	93.2	8.9	23.3	7.97
Freddie Mac	115,606	74,141	102,995	58,427	76,216	5,534	15,026	50,485
Percent	6.09	39.1	63.8	36.2	93.2	8.9	22.9	77.1
GSE Purchases, 2001:								
Fannie Mae	291,554	185,435	254,313	143,767	187,513	11,937	37,616	124,179
Percent	61.1	38.9	63.9	36.1	94.0	0.9	23.2	76.8
Freddie Mac	273,079	155,084	248,597	116,991	184,760	11,381	37,773	100,593
Percent	63.8	36.2	0.89	32.0	94.2	5.8	27.3	72.7
GSE Purchases, 2002:								
Fannie Mae	366,795	246,158	320,984	192,317	235,845	15,332	47,799	166,869
Percent	59.8	40.2	62.5	37.5	93.9	6.1	22.3	T.17
Freddie Mac	347,716	197,949	319,437	148,797	236,643	14,255	47,675	127,740
Precent	63.7	36.3	68.2	31.8	94.3	5.7	27.2	72.8

Applying 2000 census median income and minority population data results in a slight drop in the proportion of counties that are classified as underserved. Out of a total of 2,493 counties, 1,514 (65.5 percent) are underserved based on 1990 data, and 1,260 (61.4 percent) based on 2000 data. This small net change disguises a somewhat larger shift of counties, as about 11.2 percent of currently underserved counties are reclassified as served counties and 4.6 percent of currently served counties are reclassified as underserved.

Comparing underserved and served nonmetropolitan areas in Table B.10, it is apparent that underserved nonmetropolitan areas make up a larger percentage of nonmetropolitan areas as a whole than do served nonmetropolitan areas, as shown by the number of counties (1,260 for underserved (61.4%); 792 for served (38.6%)). These relationships hold true also for the number of households (9.5 million for underserved (50.5%); 9.3 million for served (49.5%)), and the population (24.9 million

for underserved (51%); 23.9 million for served (49%)) as shown in Table B.5.

Table B.10 shows that Fannie Mae's performance in 2002 (40.2 percent) was somewhat higher than Freddie Mac's (36.3 percent). This gap widens slightly (1.8 percent) in applying 2000 census income and minority data and 2003 metropolitan area definitions.

b. Characteristics of GSEs' Purchases of Mortgages on Properties in Non-metropolitan Underserved Areas

Nonmetropolitan mortgage purchases made up 11.9 percent of the GSEs' total mortgage purchases in 2002. Mortgages in underserved counties made up 39.0 percent of the GSEs' business in nonmetropolitan areas.⁵⁰

Unlike the underserved areas definition for metropolitan areas, which is based on census tracts, the rural underserved areas definition is based on counties. Rural lenders argued that they identified mortgages by the counties in which they were located rather than the census tracts; and therefore, census tracts were not an operational concept in rural areas. Market data on trends in mortgage lending for metropolitan areas are provided by HMDA; however, no comparable data source exists for rural mortgage markets. The absence of rural market data is a constraint for evaluating credit gaps in rural mortgage lending and for defining underserved areas.

One concern is whether the broad definition overlooks differences in borrower characteristics in served and underserved counties that should be included. Table B.11 compares borrower and loan characteristics for the GSEs' mortgage purchases in served and underserved areas.

⁵⁰ Underserved areas make up about 56 percent of the census tracts in nonmetropolitan areas and 47 percent of the census tracts in metropolitan areas. This is one reason why underserved areas comprise a larger portion of the GSEs' single-family mortgages in nonmetropolitan areas (39 percent) than in metropolitan areas (23 percent).

Table B.11

Loan and Borrower Characteristics of Single-Family

Mortgages Purchased by the GSEs In Nonmetropolitan Counties, 2002

	Fann	ie Mae	Frede	lie Mac	T	otal
Loan and Borrower Characteristics	Served	Underserved	Served	Underserved	Served	Underserved
Number of Loans	368,835	262,120	352,928	222,616	721,763	484,736
Loan Purpose						
Home Purchase	28.7 %	35.5 %	24.4 %	26.8 %	26.6 %	31.5 %
Refinancing	71.3	64.5	75.6	73.2	73.4	68.5
Origination Year						
Current Year	82.8 %	74.9 %	82.9 %	80.3 %	82.9 %	77 4 %
Prior Years	17.2	25.1	17.1	19.7	17.1	22.6
Loan-to-Value Ratio						
Over 95%	3.0 %	3.4 %	1.1 %	1.3 %	2.0 %	2.4 %
91-95%	7.2	11.9	7.4	8.7	7.3	10.4
81-90%	12.3	16.7	11.5	13.7	11.9	15.3
61-80%	54.4	50.2	56.0	55.4	55.2	52.6
60% or Less	23.2	17.8	24.1	20.9	23.6	19.2
Income of Borrower(s)						
60% of Area Median or Below	11.3 %	10.8 %	10.4 %	9.4 %	10.9 %	10.2 %
61-100% of Median	27.4	25.1	26.5	23.5	27.0	24.3
Below Area Median	38.7	35.9	36.9	32.8	37.8	34.5
Over 100% of Median	61.3	64.1	63.1	67.2	62.2	65.5
First-time Home Buyer	5.6 %	5.8 %	4.7 %	5.1 %	5.2 %	5.5 %
Race/National Origin of Borrower						
White	95.5 %	88.1 %	95.1 %	87.3 %	95.3 %	87.7 %
African American	0.9	5.3	0.7	1.6	8,0	3.6
Hispanic	1.7	3.5	1.4	7.5	1.5	5.3
Asian or Pacific Islander	0.6	1.4	0.6	0.9	0.6	1.2
American Indian or Alaskan Native		0.8	0.3	0.4	0.4	0.6
Other	0.8	0.9	2.0	2.3	1.4	1.5
Age of Borrower						
Under 30	9.9	10.1	9.1	9.1	9.5	9.6
30-39	27.8	26.4	26.7	25.1	27.3	25.8
40 and Over	62.3	63.6	64.2	65.8	63.2	64.6
Gender of Borrower(s)						
All Male	20.0	21.6	17.9	19.0	19.0	20.4
All Female	15.1	16.1	13.0	13.5	14.1	15.0
Male and Female	64.9	62.3	69.1	67.5	67.0	64.6

Source: HUD analysis of GSEs' loan-level data on mortgages on owner-occupied one-unit properties. In computing the percentages, missing data are excluded.

Fannie Mae is slightly more likely and Freddie Mac is less likely to purchase loans for first-time homebuyers in underserved areas than in served areas. Mortgages to first-time homebuyers accounted for 5.6 percent of Fannie Mae's mortgage purchases in served counties, compared with 5.8 percent of its purchases in underserved counties. For Freddie Mac the corresponding figures are 4.7 percent in served counties and 5.1 percent in underserved counties.

The GSEs are more likely to purchases mortgages for high-income borrowers in underserved than in served counties. Surprisingly, borrowers in served counties were more likely to have incomes below the median than in underserved counties (37.8 percent compared to 34.5 percent). These findings lend some support to the claim that, in rural underserved counties, the GSEs purchase mortgages for borrowers that probably encounter few obstacles in obtaining mortgage credit.

There are similarities and one difference between the types of loans that Fannie Mae and Freddie Mac purchase in served and underserved counties. The GSEs are similar in that they are slightly more likely to purchase refinance loans in underserved counties than in served counties; mortgage purchases with loan-to-value ratios above 80 percent are more likely to be in underserved counties than in served counties; and seasoned mortgage purchases are more likely to be in underserved than in served counties. The GSEs differ in that Fannie Mae is slightly more likely and Freddie Mac is less likely to purchase loans for first-time homebuyers in underserved areas than served areas

E. Factor 4: Size of the Conventional Conforming Mortgage Market for Underserved Areas

HUD estimates that underserved areas account for 35–40 percent of the conventional conforming mortgage market. The analysis underlying this estimate is detailed in Appendix D.

F. Factor 5: Ability To Lead the Industry

This factor is the same as the fifth factor considered under the goal for mortgage purchases on housing for low- and moderate-income families. Accordingly, see Section G of Appendix A for a discussion of this factor, as well as Section I.5 of this Appendix, which describes the home purchase subgoal which is designed to place the GSEs in a leadership role in the underserved market.

G. Factor 6: Need To Maintain the Sound Financial Condition of the Enterprises

HUD has undertaken a separate, detailed economic analysis of this rule, which includes consideration of (a) the financial returns that the GSEs earn on loans in underserved areas and (b) the financial safety and soundness implications of the housing goals. Based on this economic analysis and reviewed by the Office of Federal Housing Enterprise Oversight, HUD concludes that the goals raise minimal, if any, safety and soundness concerns.

H. Defining Nonmetropolitan Underserved Areas

1. Whether To Adopt a Tract-Based Definition of Underserved Areas

The current county-based definition for targeting GSE purchases to underserved nonmetropolitan areas was adopted in 1995 over alternative narrower definitions, such as census tracts, despite the use of census tracts in metropolitan areas. In the 1995 Final Rule, HUD found the merits of a county-based system of targeting outweighed a tract-based system. Now, with seven years of experience under a county-based system, the release of Census 2000 data, and improvements in information technology and systems, HUD can reexamine whether to switch to census tracts for defining underserved nonmetropolitan areas. This section compares impacts of the potential shift in definition for both served and underserved populations as determined by tract-based and county-based definitions using a number of common industry variables as focal points for analysis.

The rationale for choosing counties in 1995 rested primarily on perceived shortcomings of census tracts.⁵¹ In particular, rural lenders did not perceive their market areas in terms of census tracts, but rather, in terms of counties. Another concern was a perceived lack of reliability in geocoding 1990 census tracts. At the same time, HUD found merit in using a tract-based geography for nonmetropolitan areas. Because tracts encompass more homogeneous populations than counties, they permit more precise targeting of underserved populations. In other words, more homogeneous geographic areas increase the potential for targeting the GSE mortgage purchases into areas where borrowers are more likely to face obstacles and other challenges in securing mortgage credit.

The criteria used for this analysis include the following:

• Do tracts provide a sharper delineation of served and underserved areas? Specifically, are underserved nonmetropolitan populations more clearly differentiated by adopting tracts vs. counties? Could service to the underserved nonmetropolitan populations be more comprehensive under tract-based definitions?

- What is the impact on GSE purchasing patterns if underserved areas are defined by tract?
- Applying the current criteria for identifying underserved areas to tracts would result in reclassifying approximately 23 percent of all tracts, with 28 percent of tracts in served counties being redesignated as underserved and 19 percent of tracts in underserved counties being redesignated as served. Overall, roughly the same percentage of families (and population) would be reclassified. However, because underserved tracts are somewhat less densely populated than served tracts, the corresponding proportions of families that shift from served and underserved counties are closer: 25 vs. 21 percent.
- a. Do Census Tracts Allow a Sharper Delineation of Served and Underserved Areas?

This section compares the differences in housing need and economic, demographic, and housing conditions in served and underserved nonmetropolitan areas classified on, respectively, counties and tracts. Additionally, the "efficiency" with which counties and tracts cover the target populations is compared. That is, does tract-based targeting do a better job of capturing lower income households and excluding higher income households than county-based targeting?

Table B.12 presents several indicators of socioeconomic and housing condition in served and underserved areas under both a tract-based and a county-based definition. In addition, served and underserved counties are subdivided into their served and underserved tract components. This allows a closer examination of the population and housing characteristics of the tracts that are reclassified (i.e., served to underserved or visa versa) under tract-based targeting. Thus, area characteristics of housing need and housing, economic, and demographic conditions can be compared, for the following four groups of tracts: (1) Tracts in served counties that would remain "served" classified as tracts: (2) tracts that remain "underserved"; (3) tracts that shift from served to underserved; and (4) tracts that shift from underserved to served. In addition, we provide counts of tracts falling into each of these groups. If a tract-based classification of underserved areas improves geographic targeting, the regrouping of tracts would be more similar to one another than to the other tracts in their respective counties: e.g., formerly underserved areas that become served should be more similar to tracts that were and remain served than to underserved (unchanged).

⁵¹ 60 FR 61925-61958 (1995) (Appendix B).

Table B.12

On Socioeconomic and Housing Characteristics of Served and Underserved Tracts Effects of Changing to Tract-Level Nonmetropolitan Underservice Definition

	Tract De	Tract Designations	Tract De	Fract Designations				
	Based or Level	Based on County- Level Data	Based of Leve	Based on Tract- Level Data		Ana	Analysis	
					Remain	Served to	Underserved	Remain
	Served	Underserved	Served	Underserved	Served	Underserved	to Served	Underserved
Tracts	5,945	6,414	5,577	6,782	4,333	1,612	1,244	5,170
Percent	48.1%	51.9%	45.1%	54.9%	35.1%	13.0%	10.1%	41.2%
% owner-occupied	73.7%	74.0%	76.6%	71.6%	76.4%	65.2%	77.4%	73.5%
Excluding manufactured homes	73.2%	73.3%	76.4%	70.0%	76.2%	63.7%	77.2%	72.2%
Population	23,941,532	24,899,110	23,181,465	25,659,177	18,054,745	5,886,787	5,126,720	19,772,390
% African American	3.3%	13.4%	3.1%	13.2%	2.2%	9.9%	6.4%	15.2%
% Hispanic/Latino	3.4%	7.3%	3.1%	7.5%	2.9%	5.2%	3.7%	8.2%
% Minority	9.3%	25.8%	8.6%	25.9%	7.3%	15.4%	13.4%	29.1%
Poverty rate	7.5%	14.5%	99.9	15.3%	6.1%	12.0%	8.4%	16.2%
Unemployment rate	5.2%	7.3%	4.8%	7.6%	4.6%	7.1%	5.4%	7.8%
School dropout rate	18.7%	28.1%	17.7%	28.9%	17.0%	24.1%	20.2%	30.1%
Migration rate	8.0%	7.4%	7.9%	7.5%	7.8%	8.6%	8.0%	7.2%
Median family income	\$45,000	\$35,421	\$46,769	\$34,025	\$47,589	\$36,601	\$43,919	\$33,230
Median housing value	\$88,099	\$67,358	\$91,996	\$63,744	\$93,744	\$69,140	\$85,418	\$62,103
Purchase affordability	178	183	177	186	177	184	179	186
Owner occupied vacancy rate	2.3%	2.6%	2.2%	2.7%	2.1%	2.8%	2.4%	2.7%
Median rent	\$475	\$375	\$475	\$425	\$475	\$475	\$425	\$375
Rental affordability	161	161	205	191	209	191	215	185
Rental vacancy rate	8.8%	10.1%	8.8%	6.6%	8.4%	9.5%	10.4%	10.0%
Without complete plumbing	1.7%	3.2%	1.6%	3.2%	1.6%	2.1%	1.9%	3.6%
Without complete kitchen facilities	1.8%	3.2%	1.7%	3.2%	1.6%	2.3%	2.0%	3.5%
More than one occupant per room	2.3%	4.3%	2.2%	4.3%	2.1%	3.2%	2.7%	4.7%

Note: Current underservice definition applied to tracts, based on 2000 Census.

Socioeconomic and Demographic Conditions. Table B.12 shows that in important socioeconomic and demographic characteristics, tract-based targeting would more effectively distinguish underserved populations. Median family income, poverty, unemployment, school dropout rates, and minority population all exhibit greater differences between served and underserved areas using tracts. For example, the difference in median income between served and underserved counties is \$9,579, or alternatively, between served and underserved tracts, the difference is \$12,744. Similarly, there is a 7-percentage point gap in poverty rates (7.5 vs. 14.5 percent poverty) using counties, which widens to 8.6 percentage points (6.6 vs. 15.3 percent) using tracts. Minority population also is captured somewhat better with tracts, with the served/ underserved gap increasing from 16.5 to 17.3 percentage points. In all cases, the levels of the indicators for underserved areas move in a direction consistent with targeting lower income households and areas with higher minority populations.

The 4-way breakdown of served and underserved counties reveals some significant differences between the two component groups. In most respects, "underserved tracts" (i.e., those meeting the underserved criteria), whether located in an underserved or served county, are more alike than they are like served tracts. Using median income again to illustrate, the effect of reclassifying areas by tract characteristics is to put together two groups of underserved tracts: tracts that were in previously underserved counties and are not reclassified and tracts that were in served counties but meet the underserved criteria. A new group of served tracts is similarly formed. In both cases, the difference in median incomes of the constituent groups is about \$3,500. In contrast, the served and underserved counties now encompass "served" and "underserved" groups of tracts whose respective median incomes differ by almost \$11,000. Combined with the fact that a fairly large number of tracts are affected overall (i.e., switch), these results support an assessment that counties are relatively crude for targeting underserved populations.

Housing Needs and Conditions. Table B.12 shows that tract-based targeting would produce modest gains in focusing GSE purchases on areas with relatively greater housing needs and conditions as measured by low owner-occupancy, higher vacancy rates, and crowding. For each of these indicators, measured need increases in

underserved areas and the gap between served and underserved areas widens when tracts are used to classify areas. Most notably, the percent of owner-occupied housing units switches from being higher in underserved than served counties to being significantly lower among underserved tracts. With a shift to tracts overall ownership drops in underserved areas, from 74 to 72 percent, and increases in served areas from 74 to 77 percent. In contrast, the homeownership rate for tracts located in served counties that would be deemed underserved if judged separately is only 65 percent. In fact, this rate is much lower even than underserved tracts in underserved counties. Shifting these tracts from served to underserved largely accounts for the switching of homeownership rates.

Results for other indicators of housing need and conditions are less clear-cut. No definitive patterns are apparent for two, admittedly weak, measures of housing quality—units with complete plumbing and units with complete kitchen facilities, as well as for crowding. Purchase affordability, as measured by the ratio of median housing value to the income necessary to qualify for a loan for the median valued unit, is higher in underserved areas than in served areas. However, the measure of purchase affordability presented here is influenced by many market and other economic factors, some of which do not relate to housing need. For example, a low affordability ratio may reflect abundant supply, but it may also reflect low demand stemming from, e.g., limited availability of credit or high interest

Coverage Efficiency. The coverage efficiency index measures the effect of adopting tract-based targeting. This index can be used to indicate how well underserved areas encompass populations deemed to be underserved ("sensitivity") and to exclude populations that are deemed to be served ("specificity"). The index is computed for median income as the difference in two percentages: (1) the proportion of all families in nonmetropolitan areas that meet the applicable income threshold who live in underserved tracts minus (2) the proportion of all families in nonmetropolitan areas that do not meet the applicable underserved income threshold who live in underserved areas. This difference can range from 1 (perfect) to—1 (bad; perverse). For example, a coverage efficiency index equal to 1 implies that every family in need is living in an underserved area while there are no families who are not in need living in an underserved area; a coverage efficiency index equal to1 implies that none of the families in need live in an underserved area, or equivalently, all families in underserved areas are not in need.

Comparing coverage efficiency for counties and tracts indicates that tracts do a better job; capturing a higher percentage of nonmetropolitan families whose income falls below the applicable income threshold and excluding more families whose income exceeds the threshold.⁵² Overall, the efficiency index rises from 22.0 to 27.4 percent.

Given income thresholds that are not far away from median income in most places and the degree of income variation even with census tract boundaries, it should not come as a great surprise that neither the levels of coverage efficiency (22–27 percent) nor improvement produced in applying tracts (5 percent) are not more dramatic. Nevertheless, tracts do produce better tracking of lower income, very low income, and minority families.

b. Does GSE Performance Vary between Served and Underserved Tracts Within Underserved Counties?

A similar analytical approach is used to examine how a shift to tracts would impact GSE purchases. Having applied income and minority thresholds from the 2000 census and updating census tract geography, Table B.13 compares, respectively, 2000, 2001, and 2002 GSE purchases for served and underserved counties and tracts and also for the served and underserved tracts within county boundaries. On net there would be somewhat more tracts classified as underserved under a tract-based system than currently: 6,782 vs. 6,414. As noted above, however, 23.1 percent of all tracts are reclassified. Moving to tracts also would have a significant effect on the relative performance of the GSEs. In 2002, Fannie Mae's performance would drop 2.1 percentage points to 35.4 percent, while Freddie Mac's performance would increase by 0.9 percent to 32.7 percent.

⁵² In areas with 30 percent or greater minority population, all families with income in excess of 120 percent of the greater of State or national median income are counted as qualifying as "in need" for these computations. Similarly, in areas with less than 30 percent minority, those minority (headed) families with income between 95 and 120 percent of the applicable median income are not classified as "in need."

Table B.13

Effects of Changing to Tract-Level Nonmetropolitan Underservice Definition On GSE Underserved Percentages, 2000-2002

	Tract D Based o	Tract Designations Based on County- Level Data	Tract D Based Lev	Tract Designations Based on Tract- Level Data		An	Analysis	
	Served	Underserved	Served	Underserved	Remain	Served to Underserved	Underserved to Served	Remain Underserved
Tracts Percent	5,945	6,414	5,577 45.1	6,782 54.9	4,333 35.1	1,612	1,244	5,170
GSE Purchases, 2000: Fannie Mae Percent	113,829 63.2	66,346 36.8	116,554 64.7	63,628 35.3	94,131 52.2	19,701	22,423 12.4	43,92 <i>7</i> 24.4
Freddie Mac Percent	102,995	58,427 36.2	103,978 64.5	57,248 35.5	85,097 52.8	17,686	18,881	39,561 24.5
GSE Purchases, 2001: Fannie Mae Percent	254,313 63.9	143,767 36.1	260,564 65.5	137,521 34.5	213,473 53.6	40,843	47,090	96,678 24.3
Freddie Mac Percent	248,597 68.0	116,991	247,621 67.8	117,822	209,066	39,397 10.8	38,555 10.6	78,425 21.5
GSE Purchases, 2002: Fannie Mae Percent	320,984 62.5	192,31 <i>7</i> 37.5	331,386 64.6	181,957 35.4	269,614 52.5	51,488	61,771 12.0	130,469 25.4
Freddie Mac Precent	319,437 68.2	148,797 31.8	315,068 67.3	153,221 32.7	266,511 56.9	52,914 11.3	48,556 10.4	100,307

Note: Current underservice definitions applied to tracts, based on 2000 Census.

Differences between qualifying purchases of single-family and multifamily loans are further increased when assessed at the tract level. Performance for single-family loans drops 0.7 percentage points to 35.2, but for multifamily increases by 2.5 percentage points to 46.8. These changes dramatically compound the results observed in updating to 2000 census data, resulting in a widening of the single- and multifamily performance difference from the current level of 7.0 percentage points to 11.6 percentage points.

2. Alternative Definitions of Underservice

The current definition of underservice in nonmetropolitan areas was established in 1995 to be relatively broad, encompassing nearly twice as many underserved as served counties and somewhat more than half of the total nonmetropolitan population. This was done primarily to ensure that certain areas with low incomes and/or high minority populations, which might not be considered underserved in comparison to the rest of their State, would nevertheless be identified as underserved from a national perspective. This section summarizes a new analysis, based on 2000 census data, to evaluate the extent to which the current definition focuses GSE purchasing activity toward stimulating mortgage lending in areas with populations having greatest housing need. Alternative definitions of underservice are considered as follows: (1) Variations of the current thresholds; (2) applying only the State median income level for qualifying underserved counties and tracts; and (3) establishing different thresholds in micropolitan and "outside of core" nonmetropolitan areas. In each case the objective is to assess how redesignating served and underserved areas would affect relative conditions and needs and GSE purchasing performance. In distinguishing micropolitan and "outside of core" areas, it is of interest to determine whether it would be appropriate to establish different thresholds for underservice. The overarching criterion for evaluating and comparing definitions is their ability to serve very lowincome, low-income and moderate-income households, households in poverty, first-time homebuyers, minorities, and households in remote locations.53

In the current definition, areas are classified as underserved if either the minority population share is greater than 30 percent and median income is less than 120 percent of the greater of State nonmetropolitan or national nonmetropolitan median income; or area median income is less than or equal to 95 percent of the greater of State nonmetropolitan or national nonmetropolitan median income. The greater of State nonmetropolitan or national median income is termed the "reference income." Denoting the current thresholds as "30/120/95," the following set of alternative thresholds are evaluated:

• 30/120/95 vs. 30/120/90 vs. 30/120/80 to examine the effect of lowering the general income threshold from 95 percent to 90 percent to 80 percent.

- 30/120/95 vs. 30/110/95 vs. 30/110/80—to examine the effect of lowering both the minority (from 120% to 110%) and general income (from 95% to 80%) thresholds; and
- 30/120/95 vs. 50/120/95—to examine the effect of increasing the minority population threshold that must be attained before applying the minority income threshold.

For each alternative, indicators of socioeconomic and housing conditions are calculated for served and underserved areas for each alternative and compare the results to the current definition. Of particular interest is whether certain thresholds of minority population and median income capture the differences in housing needs and conditions between served and underserved areas better than others. The "coverage efficiency" of each alternative relative to households below the poverty line, below 50, 70, and 95 percent of area reference income, and below the alternative income level(s) used to define underservice, is also presented. GSE purchasing activity is also examined for each alternative definition, specifically, the percentage of eligible loans that qualify towards the goal for underserved areas defined by different thresholds. Each analysis is conducted both with counties and tracts as the geographic unit.

County Results. The main effect of lowering the general income threshold from 95 to 90 to 80 percent of the reference income is to roughly halve the number of counties and population residing in underserved areas. Under the current definition, 11.6 million people reside in underserved areas as opposed to fewer than 10 million in served areas. With a general income threshold of 80 percent, 5.7 million would be left in underserved areas. A 90 percent threshold would produce a shift of approximately half this amount.

In terms of social, economic, demographic, and housing characteristics, lowering the income threshold from 95 to 80 percent would have the following notable consequences:

- Minority population in underserved areas would increase from 12.4 to 20.8 percent with no significant change in served areas.
- Median income would fall in both served and underserved areas with the difference remaining nearly constant at \$10,000.
- Poverty, unemployment, school drop out rates all would be higher in both served and underserved areas. The gap would increase for each of these characteristics.
- Migration into underserved areas (from other States) would be relatively lower than into served areas with an 80 percent income threshold.
- Indicators of homeownership would decline somewhat in underserved areas relative to served areas. For all units, for example, ownership would decline from 74.3 to 72.9 percent in underserved areas and increase from 73.5 to 74.3 percent in served areas.
- Median housing values would fall in both served and underserved areas with a significant narrowing in the gap from approximately \$25,000 to \$19,000 at an 80 percent median income threshold.

- Housing affordability would decline in underserved areas, becoming nearly equal with affordability in served areas at 80 percent.
- Crowding would be higher in underserved areas, absolutely and relative to served areas. Thus, more narrowly defined underserved areas would more strongly manifest conditions and needs associated with underservice: lower income, higher poverty, higher minority populations, lower homeownership, lower affordability, more crowding, etc. However, served areas would expand to encompass significant numbers of these same underserved and target populations.

Use of the coverage efficiency index highlights one of the tradeoffs between using a low median income threshold versus a high median income threshold in redefining underservice. Coverage efficiency based on all variables examined, including "underserved," poor, very low income, low income and even moderate income families, declines sharply as the income threshold is lowered from 95 to 80 percent, becoming negative for most groups. Coverage for the "underserved" cohort declines from 22.0 to - 1.0 percent, and for families with up to 95 percent of reference income, it declines from 17.2 to -10.0 percent. These changes result from losing almost half of the families in target income ranges without any appreciable gain in specificity, i.e., shrinking the proportion of people living in underserved counties with incomes above the respective target levels. Similar patterns are observed for families with below 70 percent of reference income, below 50 percent of reference income, and families in poverty.

The second set of comparisons builds on the first set by lowering the income threshold applicable to areas with a relatively high minority populations (30 percent) from 120 to 110 percent in addition to the general threshold. This change further shrinks, albeit, only marginally, the size and population of underserved areas. Minority underserved populations would be smaller and socioeconomic and housing conditions would be worse. Not surprisingly, coverage efficiencies and GSE purchase performance levels also would decline across the board, although the marginal effects of reducing the minority income threshold are quite small. The 30/110/80 alternative is the narrowest definition examined and produces the biggest loses in efficiency and GSE performance.

The third variation of the current definition is an increase in the minority population threshold from 30 to 50 percent. Thus, if an area does not qualify as underserved against the general income threshold of 95 percent it could still qualify if its population is 50 percent minority and median income is less than or equal to 120 percent of the reference income level.

Relatively few counties qualify solely under the current minority thresholds. Raising the population threshold would trim this number by an additional 73 counties (457 tracts). Not surprisingly, the percent minority in underserved areas would decrease. However, the areas being redesignated as served are apparently somewhat above average in terms of

⁵³ A more comprehensive presentation of this analysis may be found in Economic Systems, Inc., Indicators of Mortgage Market Underservice in Non-Metropolitan Areas, Interim Report to HUD, March 2003, Chapter 6.

socioeconomic and housing conditions in underserved areas and below-average in terms of conditions in served areas. Coverage efficiencies for all cohorts would be lower than for the current definition of underservice and GSE performance overall would be approximately 90 percent of the current level.

Using the State median income, alone, as the general reference income would reduce the number underserved counties relative to the current definition, and, although there would still be more underserved counties (1,274 vs. 1,064), the underserved population actually would become smaller than the served population. The effect of this alternative on differences in housing conditions and needs between served and underserved areas is generally small and ambiguous, but overall, results in less contrast. Consistent with the results for other alternatives, applying a State median income standard, alone, would result in lower coverage efficiency across all target groups.

Census Tract Results. As discussed above, the adoption of a tract-based system would result in greater coverage efficiency of underserved populations and sharper distinctions in the socioeconomic, demographic and housing characteristics of served and underserved areas. That is, tracts more effectively carve out areas that exhibit characteristics that are associated with underservice, such as low income, large minority populations and low homeownership. The converse is true for served areas. In analysis at the tract level, these patterns tend to be maintained quite consistently. A tract-based system would improve the power to differentiate underserved and served populations. According to virtually every indicator of socioeconomic, demographic, and housing conditions, applying State median income, alone, with a tract-based geography would produce superior differentiation to the current county-based definition. In terms of coverage efficiency, we again see improvement with tracts, but not enough to offset the loss of eliminating the national median income threshold. For the underserved population, for example, coverage efficiency would be 16.9 percent with tracts, still below 22 percent under the current definition.54

I. Determination of the Underserved Areas **Housing Goal**

The proposed annual goal for each GSE's purchases of mortgages financing housing for properties located in geographically targeted areas (central cities, rural areas, and other underserved areas) is 38 percent of eligible units financed in 2005, 39 percent in 2006 and 2007, and 40 percent in 2008. The 2008 goal will remain in effect in subsequent years, unless changed by the Secretary prior to that time. The goal of 38 percent for 2005 is larger than the goal of 31 percent for 2001-03 mainly because, compared with the 1990

Census, the 2000 Census includes a larger number of census tracts that meet HUD's definition of underserved area. The proposed new 38 percent-40 percent goals are commensurate with recent market share estimates of 37-40 percent for 1999-2002, presented in Appendix D.

In addition, an Underserved Areas Housing Subgoal of 33 percent is proposed for the GSEs' acquisitions of single-family-owner home purchase loans in metropolitan areas in 2005, with the proposed subgoal rising to 34 percent in 2006 and 35 percent in both 2007 and 2008. The subgoal is designed to encourage the GSEs to lead the primary market in providing mortgage credit in underserved areas.

This section summarizes the Secretary's consideration of the six statutory factors that led to the Underserved Area Housing Goal and the subgoal for home purchase loans in metropolitan areas. This section discusses the Secretary's rationale for defining underserved areas and it compares the characteristics of such areas and untargeted areas. The section draws heavily from earlier sections which have reported findings from HUD's analyses of mortgage credit needs as well as findings from other research studies investigating access to mortgage credit.

1. Housing and Credit Disparities in Metropolitan Areas

There are families who are not being adequately served by the nation's housing and mortgage markets. A major HUD-funded study of discrimination in the sales and rental markets found that while discrimination against minorities was generally down since 1989, it remained at unacceptable levels in 2000. The greatest share of discrimination against Hispanic and African American home seekers can still be attributed to being told that units are unavailable when they are available to whites and being shown and told about fewer units than a comparable white home seeker. There has also been an upward trend of discrimination in the area of geographic steering for African Americans.

Racial disparities in mortgage lending are also well documented. HUD-sponsored studies of the pre-qualification process conclude that African Americans and Hispanics faced a significant risk of unequal treatment when they visit mainstream mortgage lenders. Numerous studies of HMDA data have shown that mortgage denial rates are substantially higher for African Americans and Hispanics, even after controlling for applicant income. And the now-famous Boston Fed study found that the higher denial rates for minorities remained after controlling for a host of underwriting characteristics, such as the credit record of the applicant. Partly as a result of these racial disparities in the housing and mortgage markets, the homeownership rate for minorities is 25 percentage points below that for whites.

There are also neighborhoods that are not being adequately served by the nation's housing and mortgage industries. The existence of substantial neighborhood disparities in homeownership and mortgage credit is well documented for metropolitan

areas. HUD's analysis of HMDA data shows that mortgage credit is substantially lower in high-minority and low-income neighborhoods and mortgage denial rates are much higher for residents of these neighborhoods. The economics literature discusses the underlying causes of these disparities in access to mortgage credit, particularly as related to the roles of discrimination, segregation, "redlining" of specific neighborhoods, and the barriers posed by underwriting guidelines that disadvantage applicants from inner city neighborhoods. Studies reviewed in Section B of this Appendix found that the racial and income composition of neighborhoods influence mortgage access even after accounting for demand and risk factors that may influence borrowers' decisions to apply for loans and lenders' decisions to make those loans. Therefore, the Secretary concludes that high-minority and lowincome neighborhoods in metropolitan areas are underserved by the mortgage system. The income and minority composition of an area is a good measure of whether that area is being underserved by the mortgage market.

2. Identifying Underserved Portions of Metropolitan Areas

To identify areas underserved by the mortgage market, HUD focused on two traditional measures used in a number of studies based on HMDA data: application denial rates and mortgage origination rates per 100 owner-occupied units. Tables B.2 and B.3 in Section B of this Appendix presented detailed data on denial and origination rates by the racial composition and median income of census tracts for metropolitan areas. Aggregating this data is useful in order to examine denial and origination rates for broader groupings of census tracts:55

Minority composi- tion (percent)	Denial rate (percent)	Orig. rate
0–30 30–50 50–100	8.7 11.2 16.3	19.3 19.3 14.7
Tract income	Denial rate (percent)	Orig. rate
Less than 90% of AMI	15.6 10.1	13.9 18.6

7.1

22.7

Two points stand out. First, high-minority census tracts have higher denial rates and lower origination rates than low-minority tracts. Specifically, tracts that are over 50 percent minority have nearly twice the denial rate and three-fourths the origination rate of tracts that are under 30 percent minority.56

Greater than 120%

⁵⁴ Note that, unlike the other panels in tables 6.3 and 6.8, "underserved population" is defined according to the applicable definition. Thus, eliminating the national median income test, narrows the defined cohort of underserved families. Despite this, coverage falls.

⁵⁵ Denial rates are computed for mortgage applications without manufactured housing loans. Origination rates equal home purchase and refinance mortgages (without subprime loans) per 100 owner occupants in a census tract.

⁵⁶ The differentials in denial rates are due, in part, to differing risk characteristics of the prospective

Second, census tracts with lower incomes have higher denial rates and lower origination rates than higher income tracts. Tracts with income less than 90 percent of area median income have over twice the denial rate and three-fifths the origination rate of tracts with income over 120 percent of area median income.

In both the 1995 and the 2000 GSE Rules, HUD's research determined that "underserved areas" could best be characterized in metropolitan areas as census tracts where: (1) median income of families in the tract does not exceed 90 percent of area (MSA) median income or (2) minorities comprise 30 percent or more of the residents and median income of families in the tract does not exceed 120 percent of area median income. The earlier analysis was based on 1990 Census data. HUD has now conducted the same analysis using 2000 Census data and has determined that the above definition

borrowers in different areas. However, use of denial rates is supported by the findings in the Boston Fed study which found that denial rate differentials persist, even after controlling for risk of the borrower. See Section B for a review of that study.

continues to be a good proxy for underserved areas in metropolitan areas. The income and minority cutoffs produce sharp differentials in denial and origination rates between underserved areas and adequately served areas. For example, in 2002 the mortgage denial rate in underserved areas (14.0 percent) was over one-and-a-half times that in adequately served areas (8.9 percent).

These minority population and income thresholds apply in the suburbs as well as in central cities. The average denial rate in underserved suburban areas (13.7 percent) is 1.7 times that in the remaining served areas of the suburbs (8.0 percent), and is almost as large as the average denial rate (15.8 percent) in underserved central city tracts. Lowincome and high-minority suburban tracts appear to have credit problems similar to their central city counterparts. Thus HUD uses the same definition of underserved areas throughout metropolitan areas—there is no need to define such areas differently in central cities and in the suburbs.

This definition of metropolitan underserved areas based on 2000 Census geography includes 26,316 of the 51,040 census tracts in metropolitan areas, covering 49.2 percent of the metropolitan population in 2000. (By contrast, the 1990-based definition included 21,587 of the 45,406 census tracts in metropolitan areas, covering 44.3 percent of the metropolitan population in 1990.) The 2000-based definition includes 75.7 percent of the population living in poverty in metropolitan areas. The unemployment rate in underserved areas is more than twice that in served areas, and owner units comprise only 51.6 percent of total dwelling units in underserved tracts, versus 75.9 percent of total units in served tracts. As shown in Table B.14, this definition covers most of the population in several distressed central cities including Bridgeport (100 percent), Newark (99 percent), and Detroit (93 percent). The nation's five largest cities also contain large concentrations of their population in underserved areas: New York (68 percent), Los Angeles (72 percent), Chicago (75 percent), Houston (73 percent), and Phoenix (50 percent).

Table B.14

Needy Areas in Central Cities Would be Covered

Central Ci	ities with Mc Geog	Central Cities with More than 90 Percent of Population Included in Geographically Targeted Tracts	cluded in
Bridgeport			%001
Trenton			%001
Lawrence			%001
York			100%
Atlantic City-Cape May			%001
Newburgh			100%
Newark			%66
Gary			<i>%</i> 96
Reading			93%
Detroit			93%
Harrisburg-Lebanon-Carlisle			92%
		Five Largest Cities	
New York			88%
Los Angeles			72%
Chiona			20 37
J			500
Housion			13%
Phoenix			20%
	Central C	Central Cities with Small Concentrations	
Large Cities		Small Cities	
Johnson City-Kingport-Bristol	28%	Jonseboro, AR	14%
Knoxville	33%	Steubenville, OH- Weirton, WV	15%
Eugene-Springfield	35%	Wheeling, WV	%61
Lincoln	36%	Bismarck, ND	20%
Boise City	37%	Dubugue, IA	25%
Lexington	38%	Missoula, MT	26%
Lakeland-Winter Haven	38%	Eau Claure, WI	26%
Santa Rosa	40%	Joplin, MO	27%

Source: 2000 Census.

3. Identifying Underserved Portions of Nonmetropolitan Areas

Based on an exploration of alternative numerical criteria for identifying underserved nonmetropolitan areas using 2000 census data, HUD has concluded that the current definition of underservice is broad but efficacious and that any narrower definition of underservice would not serve congressional intent under FHEFSSA. Narrowing the definition of underservice potentially could promote more intense purchasing in needier communities, but this seems unlikely. On the contrary, the greatest marginal impact on GSE purchasing could be in the very areas that would be excluded under the alternatives.

Research comparing a tract-based system for defining underserved areas with the current county-based system, using 2000 census data, indicates that a tract-based system would result in more effective geographic targeting of GSE purchases. Although the total number of tracts designated as served and underserved areas would change very little, 23 percent of all tracts would be reclassified, reassigning approximately equal numbers of families from served to underserved and from underserved to served.

The main effect of the reclassification is to align tracts into more homogeneous and distinct groups as measured by differences in key socioeconomic and demographic characteristics such as median family income, poverty, unemployment, school dropouts, and minority population. As a result of reclassification, underserved areas stand out more as areas of lower income and economic activity and somewhat larger minority populations.

Tract-based targeting would potentially focus GSE purchases in areas with relatively greater housing needs and conditions as measured by owner-occupancy, vacancy rates, and crowding. For each of these indicators, measured need increases in underserved areas and the gap between served and underserved areas widens when tracts are used to classify areas. Most notably, homeownership would be significantly lower in underserved areas relative to served areas under a tract-based system. Currently, and contrary to expectations, homeownership actually is slightly greater in underserved areas. Driving this reversal is the fact that tracts in served counties that would be reclassified as underserved tracts have an ownership rate of just 65 percent, which is much lower even than in the underserved tracts in underserved counties, where ownership is 73 percent. Meanwhile, the served tracts in served and underserved counties have the same ownership rate of 77 percent, which is significantly higher than in underserved areas.

Two groups of measures of housing conditions—housing quality and affordability—exhibit less clear-cut results from applying tracts. However, we conclude that these results are consistent with the ambiguous patterns discussed in chapter 4 above and do not undermine the overall conclusion that basing geographic targeting on tracts would more sharply define areas with greater housing need and adverse housing conditions.

Not surprisingly, the results from analyzing housing, socioeconomic, and demographic characteristics are further reinforced in finding that a tract-based system would better capture underserved populations and exclude served populations from geographic

targeting. Defining underserved families as those in any area whose income was less than 95 percent of the reference income (or in areas with a minority population of 30 percent or more, families with incomes below 120 percent of the reference income) the use of more refined tract geography results in a 5 percentage point increase in the coverage efficiency index, from 22 to 27 percent. This reflects two improvements under a tract system: underserved areas would capture more of the nonmetropolitan "underserved" families (62 vs. 65 percent) and fewer "served" families (decreasing from 40 to 37 percent of families in underserved areas).

4. Past Performance of the GSEs

Goals Performance. In the October 2000 rule, the underserved areas goal was set at 31 percent for 2001-03. Effective on January 1, 2001, several changes in counting requirements came into effect for the undeserved areas goal, as follows: (a) "bonus points" (double credit) for purchases of mortgages on small (5-50 unit) multifamily properties and, above a threshold level, mortgages on 2-4 unit owner-occupied properties; (b) a "temporary adjustment factor" (1.35 units credit) for Freddie Mac's purchases of mortgages on large (more than 50 unit) multifamily properties; and (c) eligibility for purchases of certain qualifying government-backed loans to receive goal credit. Under these counting rules, as shown in Figure B.2, Fannie Mae's performance in 2001 was 32.6 percent and Freddie Mac's performance was 31.7 percent; thus both GSEs surpassed the goal of 31 percent. BILLING CODE 4210-27-P

■ 1999 □ 2000 **2001**

1998

□ 2002

31.9% 31.7% Mortgage Purchases in Underserved Areas 29.2% 27.5% 26.1% Figure B.2 32.8% 32.6% 31.0% 26.8% 27.0%

Freddie Mac Fannie Mae 35% 30% 25% 20% 10%5% 0% 15%

Underserved Areas Housing Goal was 24% of units financed for 1998-2000 and 31% for 2001-02.

performance in 2001-02 is not strictly comparable with performance in 1998-2000, as discussed Source: HUD analysis of GSEs' loan-level data. Due to changes in goal counting procedures in 2001,

Counting requirements (a) and (b) expired at the end of 2003, while (c) will remain in effect after that. If this counting approachwithout the bonus points and the "temporary adjustment factor"—had been in effect in 2000 and 2001, and the GSEs' had purchased the same mortgages that they actually did purchase in both years, then Fannie Mae's performance would have been 31.0 percent in 2000, 30.4 percent in 2001, and 30.2 percent in 2002. Freddie Mac's performance would have been 29.2 percent in 2000, 28.2 percent in 2001, and 29.4 percent in 2002. Therefore, Fannie Mae would have just matched the underserved areas goal of 30 percent in 2000 and fallen short in 2001 and 2002, while Freddie Mac would have fallen short of the goal in 2000-2002.

The above performance figures are for underserved areas (census tracts in metropolitan areas and counties in nonmetropolitan areas) defined in terms of 1990 Census geography. Switching to 2000 Census data increases the coverage of underserved areas, which increases the share of the GSEs' purchases in underserved areas by approximately 5 percentage points. Based on 2000 Census geography, and excluding counting requirements (a) and (b) then Fannie Mae 's performance would have been

38.1 percent in 2000, 36.6 percent in 2001, and 35.9 percent in 2002. Freddie Mac's performance would have been 35.1 percent in 2000, 33.5 percent in 2001, and 33.6 percent in 2002.

Single-Family-Owner Home Purchase Mortgages. Sections E.9 of Appendix A and D.2 of this appendix compared the GSEs' funding of home purchase loans in underserved areas with originations by lenders in primary market. To take advantage of HMDA and GSE data going back to 1993, the analysis was conducted using 1990 Census tract geography. While both GSEs have improved their performance since 1993, they have both lagged the conventional conforming market in providing affordable loans to underserved areas. The 1990-based analysis shows that the two GSEs have engaged in very different patterns of funding-Freddie Mac has been much less likely than Fannie Mae to fund home loans in underserved neighborhoods. HUD will begin defining underserved areas based on 2000 Census geography and new OMB definitions of metropolitan areas in 2005, the first year of the proposed rule. As noted above, the 2000-based definition of underserved areas includes 5,372 more census tracts in metropolitan areas than the

1990-based definition, which means the GSEmarket comparisons need to be updated to incorporate tract designations from the 2000 Census. Therefore, for the years 1999, 2000, 2001, and 2002, HUD used various apportionment techniques to re-allocate 1990-based GSE and HMDA data into census tracts as defined by the 2000 Census. Switching to the 2000-based tracts increases the underserved area share of market originations by 5.7 percentage points. Between 1999 and 2002, 31.5 percent of mortgage originations (without B&C loans) were originated in underserved tracts based on 2000 geography, compared with 25.8 percent based on 1990 geography. As shown in Table B.8 of Section D.2, the underserved areas share of each GSE's purchases also rises by approximately 5.5 percentage points. Thus, conclusions about the GSEs' performance relative to the market are similar whether the analysis is conducted in terms of 2000 Census geography or 1990 Census geography.

The analysis for home purchase loans based on 2000 Census geography will be summarized here (see Section D.2 of this appendix for a similar analysis using 1990-based geography):

Year	Freddie Mac (percent)	Fannie Mae (percent)	Market (w/o B&C) (percent)
1999	26.1 27.4 27.4 31.7 28.3	27.0 29.9 30.8 32.3 29.5	31.4 32.9 31.6 32.3 31.5
1996–2001 (average)	27.1	29.0	31.1

Between 1999 and 2002, 28.3 percent of Freddie Mac's purchases and 29.5 percent of Fannie Mae's purchases financed properties in underserved neighborhoods, compared with 31.5 percent home purchase loans originated in the conventional conforming market (excluding B&C loans). Thus, Freddie Mac performed at 90 percent of the market level, while Fannie Mae performed at 94 percent of the market level-both results similar to those reported above for underserved areas based on 1990 Census geography. The 2000-based results also show that Fannie Mae has improved its performance and matched the primary market in funding underserved areas during 2002. The share of Fannie Mae's purchases going to underserved areas increased from 27.0 in 1999 to 32.3 percent in 2002, which placed it at the market level. However, the 2000-based results show that, like Freddie Mac, Fannie Mae's longer-term performance (since 1996) as well as its recent average performance (1999 to 2001) has consistently been below market levels. But, it is encouraging that Fannie Mae significantly improved its performance relative to the market during the first two years of HUD's higher housing goal levels. (See Section D.2 for the method of estimating the 1996-2002 average results.)

5. Ability To Lead the Single-Family-Owner Market: A Subgoal for Underserved Areas

The Secretary believes the GSEs can play a leadership role in underserved markets. Thus, as discussed in Section D.2, the Department is proposing to establish a subgoal of 33 percent for each GSE's acquisitions of home purchase loans for single-family-owner properties located in the underserved census tracts of metropolitan areas in 2005, rising to 34 percent in 2006 and 35 percent in both 2007 and 2008. If the GSEs meet this subgoal, they will be leading the primary market by about 1.5 percentage points in 2005 and 3.5 percentage points in 2007–2008, based on historical data. As discussed above, underserved areas accounted for an average of 31.5 percent of home purchase loans originated in the conventional conforming market of metropolitan areas (computed over 1999-2002 or over 2001-2002). To reach the 33percent (35-percent) subgoal for 2005 (2007-2008), both GSEs would have to improve their performance—Fannie Mae by 1.9 (3.9) percentage points over its average performance of 31.1 percent during 2001 and 2002, and by 0.7 (2.7) percentage points over its performance of 32.3 percent in 2002; and Freddie Mac by 3.4 (5.4) percentage points over its average performance of 29.6 percent in 2001 and 2002, and by 1.3 (2.3) percentage points over its performance of 31.7 percent

in 2002. Loans in the B&C portion of the subprime market are excluded from the market average of 31.5 percent for 1999–2001.

The subgoal applies only to the GSEs' purchases in metropolitan areas because the HMDA-based market benchmark is only available for metropolitan areas. HMDA data for non-metropolitan counties are not reliable enough to serve as a market benchmark. The Department is also setting home purchase subgoals for the other two goals-qualifying categories, as explained in Appendices A and C.

The approach taken is for the GSEs to obtain their leadership position by staged increases in the underserved areas subgoal; this will enable the GSEs to take new initiatives in a correspondingly staged manner to achieve the new subgoal each year. Thus, the increases in the underserved areas subgoal are sequenced so that the GSEs can gain experience as they improve and move toward the new higher subgoal targets.

Appendix A discusses in some detail the factors that the Department considered when setting the subgoal for low- and moderate-income loans. Several of the considerations were general in nature—for example, related to the GSEs' overall ability to lead the single-family-owner market—while others were specific to the low-mod subgoal. Because the reader can refer to Appendix A, this

appendix provides a briefer discussion of the more general factors. The specific considerations that led to the subgoal for underserved areas can be organized around the following four topics:

(1) The GSEs have the ability to lead the market. As discussed in Appendix A, the GSEs have the ability to lead the primary market for single-family-owner loans, which is their "bread-and-butter" business. Both GSEs have been dominant players in the home purchase market for years, funding 57 percent of the single-family-owner mortgages financed between 1999 and 2002. Through their many new product offerings and their various partnership initiatives, the GSEs have shown that they have the capacity to operate in underserved neighborhoods. They also have the staff expertise and financial resources to make the extra effort to lead the primary market in funding single-familyowner mortgages in undeserved areas.

(2) The GSEs have lagged the market. Even though they have the ability to lead the market, they have not done so, as discussed above. The type of improvement needed to meet this new underserved area subgoal was demonstrated by Fannie Mae during 2001 and 2002. During 2001, underserved area loans declined as a percentage of primary market originations (from 32.2 to 30.9 percent), but they increased as a percentage of Fannie Mae's purchases (from 29.1 to 29.8 percent); and during 2002, they increased further as a percentage of Fannie Mae's purchases (from 29.8 to 32.3 percent), placing Fannie Mae at the market level.

(3) There are disparities among neighborhoods in access to mortgage credit. There remain troublesome neighborhood disparities in our mortgage markets, even after the substantial growth in conventional lending to low-income and minority neighborhoods that accompanied the socalled "revolution in affordable lending" There is growing evidence that inner city neighborhoods are not being adequately served by mainstream lenders. Some have concluded that a dual mortgage market has developed in our nation's financing system, with conventional mainstream lenders serving white families living in the suburbs and FHA and subprime lenders serving minority families concentrated in inner city neighborhoods.57 In addition to the unavailability of mainstream lenders. families living in these often highlysegregated neighborhoods face many additional hurdles, such as lack of cash for a down payment, credit problems, and discrimination. Immigrants and minorities,

who disproportionately live in underserved areas, are projected to account for almost two-thirds of the growth in the number of new households over the next ten years. To meet the diverse and unique needs of these families, the GSEs must continue adjusting their underwriting guidelines and offering new products so that they can better serve these areas and hopefully attract more mainstream lenders into our inner city neighborhoods.

(4) There are ample opportunities for the GSEs to improve their performance. Mortgages are available for the GSEs to purchase in underserved areas. They can improve their performance and lead the primary market in purchasing loans in these low-income and high-minority neighborhoods. The underserved areas share of the home purchase market has consistently been around 31 percent since 1995, which suggests a degree of underlying strength in the market. According to the market share data reported in Table A.30 of Appendix A, the GSEs have been purchasing about half of new originations in underserved areas, which means there are plenty of purchase opportunities left for them in the non-GSE portion of that market. In addition, the GSEs' purchases under the subgoal are not limited to new mortgages that are originated in the current calendar year. The GSEs can purchase loans from the substantial, existing stock of affordable loans held in lenders' portfolios, after these loans have seasoned and the GSEs have had the opportunity to observe their track record. In fact, both GSEs have often purchased seasoned loans that were used to finance properties in underserved areas (see Table A.11 in Appendix A).

To summarize, although single-familyowner mortgages comprise the "bread-andbutter" of their business, the GSEs have lagged behind the primary market in financing properties in underserved areas. For the reasons given above, the Secretary believes that the GSEs can do more to raise the share of their home loan purchases in underserved areas. This can be accomplished by building on efforts that the enterprises have already started, including their new affordable lending products, their many partnership efforts, their outreach to inner city neighborhoods, their incorporation of greater flexibility into their underwriting guidelines, and their purchases of CRA loans. A wide variety of quantitative and qualitative indicators indicate that the GSEs' have the resources and financial strength to improve their affordable lending performance enough to lead the market in underserved areas.

6. Size of the Mortgage Market for Underserved Areas

As detailed in Appendix D, the market for mortgages in underserved areas is projected to account for 35–40 percent of dwelling units financed by conventional conforming mortgages; in estimating the size of the market, HUD used alternative assumptions about future economic and market conditions that were less favorable than those that existed over the last five years. Between 1999 and 2002, the underserved areas market averaged 39 percent. HUD is well aware of

the volatility of mortgage markets and the possible impacts on the GSEs' ability to meet the housing goals. Should conditions change such that the goals are no longer reasonable or feasible, the Secretary has the authority to revise the goals.

7. The Underserved Areas Housing Goal for 2005–2008

The proposed Underserved Areas Housing Goal for 2005 is 38 percent of eligible purchases, rising to 39 percent in 2006 and 40 percent in 2007 and 2008. Five percent of the seven percentage point increase in 2005 simply reflects the expanded coverage of HUD's definition in the 2000 Census tract data. The bonus points for small multifamily properties and owner-occupied 2-4 units, as well as Freddie Mac's Temporary Adjustment Factor, will no longer be in effect for goal counting purposes. It is recognized that neither GSE would have met the 38-percent target for 2005 in the past three years. Fannie Mae's performance is projected to have been 37.5 percent in 2000, 35.7 percent in 2001, and 35.0 percent in 2002, under a 2000-based underserved area goal. Freddie Mac's performance is projected to have been 34.1 percent in 2000, 32.5 percent in 2001, and 32.8 percent in 2002. However, the market for the Underserved Areas Housing Goal averaged 39 percent between 1999 and 2002. Thus, the GSEs should be able to improve their performance enough to meet these targets of 38 percent-40 percent.

The objective of HUD's proposed Underserved Areas Housing Goal is to bring the GSEs' performance to the upper end of HUD's market range estimate for this goal (35-40 percent), consistent with the statutory criterion that HUD should consider the GSEs ability to lead the market for each Goal. To enable the GSEs to achieve this leadership, the Department is proposing modest increases in the Underserved Areas Housing Goal for 2005 which will increase further through 2008, to achieve the ultimate objective for the GSEs to lead the market under a range of foreseeable economic circumstances by 2008. Such a program of staged increases is consistent with the statutory requirement that HUD consider the past performance of the GSEs in setting the Goals. Staged increases in the Underserved Areas Housing Goal will provide the enterprises with opportunity to adjust their business models and prudently try out business strategies, so as to meet the required 2008 level without compromising other business objectives and requirements.

The analysis of this section implies that there are many opportunities for Fannie Mae and Freddie Mac to improve their overall performance on the Underserved Areas Housing Goal. The GSEs provided financing for 49 percent of the single-family and multifamily units that were financed in the conventional conforming market between 1999 and 2002. However, in the underserved areas portion of the market, the GSE's purchases represented only 41 percent of the dwelling units that were financed in the market. Thus, there appears to be ample room for the GSEs to increase their purchases of loans that qualify for the Underserved Areas Housing Goal. In addition, there are

⁵⁷ See Dan Immergluck, Stark Differences: The Explosion of the Subprime Industry and Racial Hypersegmentation in Home Equity Lending, Woodstock Institute, October 2000; and Daniel Immergluck and Marti Wiles, Two Steps Back: The Dual Mortgage Market, Predatory Lending, and the Undoing of Community Development, Woodstock Institute, Chicago, IL, November 1999. For a nationl analyses, see the HUD report Unequal Burden: Income and Racial Disparities in Subprime Lending in America, April 2000; and Randall M. Scheesele, Black and White Disparities in Subprime Mortgage Refinance Lending, Housing Finance Working Paper No. HF-114, Office of Policy Development and Research, U.S. Department of Housing and Urban Development, April 2002.

several market segments that would benefit from a greater secondary market role by the GSEs, and many of these market segments are concentrated in underserved areas.

8. Conclusions

Having considered the projected mortgage market serving low- and moderate-income families, economic, housing and demographic conditions for 2005-08, and the GSEs' recent performance in purchasing mortgages in underserved areas the Secretary has determined that the proposed annual goal of 38 percent of eligible units financed in, 2005, 39 percent in 2006 and 2007, and 40 percent in 2008 is feasible. The Secretary has also proposed a subgoal of 33 percent for the GSEs' purchases of single-family-owner mortgages in metropolitan areas, for 2005, rising to 34 percent in 2006 and 35 percent in 2007 and 2008. The Secretary has considered the GSEs' ability to lead the industry as well as the GSEs' financial condition. The Secretary has determined that the proposed goals and subgoals are necessary and appropriate.

Appendix C—Departmental Considerations To Establish the Special Affordable Housing Goal

A. Introduction

1. Establishment of the Goal

The Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (FHEFSSA) requires the Secretary to establish a special annual goal designed to adjust the purchase by each GSE of mortgages on rental and owner-occupied housing to meet the unaddressed needs of, and affordable to, low-income families in low-income areas and very-low-income families (the Special Affordable Housing Goal).

In establishing the Special Affordable Housing Goal, FHEFSSA requires the Secretary to consider:

- 1. Data submitted to the Secretary in connection with the Special Affordable Housing Goal for previous years;
- 2. The performance and efforts of the GSEs toward achieving the Special Affordable Housing Goal in previous years;
- 3. National housing needs of targeted families;
- The ability of the GSEs to lead the industry in making mortgage credit available for low-income and very-low-income families; and
- 5. The need to maintain the sound financial condition of the enterprises.

2. The Goal and Subgoals

Special Affordable Housing Goal. The proposed rule provides that the Special Affordable Housing Goal will be 22 percent in 2005, 24 percent in 2006, 26 percent in 2007, and 28 percent in 2008.

Units That Count Toward the Goal. Units that count toward the Special Affordable Housing Goal include units occupied by low-income owners and renters in low-income areas, and very low-income owners and renters. Other low-income rental units in multifamily properties count toward the goal where at least 20 percent of the units in the property are affordable to families whose

incomes are 50 percent of area median income or less, or where at least 40 percent of the units are affordable to families whose incomes are 60 percent of area median income or less.

Multifamily Subgoal. HUD has established a special affordable subgoal for GSE purchases of multifamily mortgages. This subgoal is expressed in terms of a minimum annual dollar volume of multifamily mortgage purchases for units qualifying for the goal, rather than as a percentage of total units financed, as for the three housing goals. Both GSEs have consistently surpassed the multifamily subgoal since its establishment in 1996. The proposed rule increases the subgoal such that, of the total Special Affordable mortgage purchases each year, each GSE must purchase special affordable multifamily mortgages in dollar amount equal to at least 1 percent of its combined (i.e., single-family and multifamily) annual average mortgage purchases over the 2000-2002 period. The proposed level of this subgoal is \$5.49 billion per year for Fannie Mae and \$3.92 billion per year for Freddie Mac.

Single-Family-Owner Home Purchase Subgoal. The Department proposes to establish a subgoal of 17 percent for the share of each GSE's purchases of single-family-owner home purchase mortgages that qualify as special affordable and are originated in metropolitan areas in 2005, with the proposed subgoal rising to 18 percent in 2006, and 19 percent in 2007 and 2008.

B. Consideration of the Factors

In considering the factors under FHEFSSA to establish the Special Affordable Housing Goal, HUD relied upon data gathered from the American Housing Survey through 2000, the Census Bureau's 1991 Residential Finance Survey, the 1990 and 2000 Censuses of Population and Housing, Home Mortgage Disclosure Act (HMDA) data for 1992 through 2002, and annual loan-level data from the GSEs on their mortgage purchases through 2002. Appendix D discusses in detail how these data resources were used and how the size of the conventional conforming market for this goal was estimated.

The remainder of Section C discusses the factors listed above, and Section D provides the Secretary's rationale for establishing the Special Affordable Housing Goal.

Factors 1 and 2. Data submitted to the Secretary in Connection With the Special Affordable Housing Goal for Previous Years, and the Performance and Efforts of the Enterprises Toward Achieving the Special Affordable Housing Goal in Previous Years

The discussions of these two factors have been combined because they overlap to a significant degree.

This section discusses each GSE's performance under the Special Affordable Housing Goal over the 1996–2002 period. As explained in Appendix A, the data presented are "official HUD results" which, in some cases, differ from goal performance reported by the GSEs in the Annual Housing Activities

Reports (AHARs) that they submit to the Department.

The main finding of this section is that both Fannie Mae and Freddie Mac surpassed the Department's Special Affordable Housing Goals for each of the seven years during this period. Specifically:

- The goal was set at 12 percent for 1996; Fannie Mae's performance was 15.4 percent and Freddie Mac's performance was 14.0 percent.
- The goal was set at 14 percent for 1997–2000. Freddie Mac's performance was 15.2 percent in 1997, 15.9 percent in 1998, 17.2 percent in 1999, and 20.7 percent in 2000; and Fannie Mae's performance was 17.0 percent in 1997, 14.3 percent in 1998, 17.6 percent in 1999, and 19.2 percent in 2000.
- In HUD's Housing Goals 2000 Final Rule, the special affordable goal was set at 20 percent for 2001-03. As of January 1, 2001, several changes in counting requirements took effect for the special affordable goal, as follows: "bonus points" (double credit) for purchases of goal-qualifying mortgages on small (5-50 unit) multifamily properties and, above a threshold level, mortgages on 2-4 unit owner-occupied properties; a "temporary adjustment factor" (1.20 units credit, subsequently increased by Congress to 1.35 units credit) for Freddie Mac's purchases of goal-qualifying mortgages on large (more than 50-unit) multifamily properties; changes in the treatment of missing data; a procedure for the use of imputed or proxy rents for determining goal credit for multifamily mortgages; and changes regarding the "recycling" of funds by loan originators. These changes are explained below. Fannie Mae's performance was 21.6 percent in 2001 and 21.4 percent in 2002, and Freddie Mac's performance was 22.6 percent in 2001 and 21.4 percent in 2002, thus both GSEs surpassed this higher goal in both years. This section discusses the October 2000 counting rule changes in detail and provides data on what goal performance would have been in 2001-02 without these changes.2

In addition, HUD has established a special affordable subgoal for GSE purchases of multifamily mortgages. This subgoal is expressed in terms of a minimum annual dollar volume of multifamily mortgage purchases for units qualifying for the goal, rather than as a percentage of total units financed, as for the three housing goals. As discussed below, both GSEs surpassed the multifamily subgoal in each of these years.

a. Performance on the Special Affordable Housing Goal in 1996–2002

HUD's Housing Goals 1995 Final Rule specified that in 1996 at least 12 percent of the number of units financed by each of the GSEs that were eligible to count toward the Special Affordable Housing Goal should qualify for the goal (that is, be for very low-income families or low-income families in low-income areas), and at least 14 percent should qualify in 1997–2000. HUD's October

¹Performance for the 1993–95 period was discussed in HUD's Housing Goals 2000 Final Rule.

² To separate out the effects of changes in counting rules that took effect in 2001, this section also compares performance in 2001 to estimated performance in 2000 if the 2001 counting rules had been in effect in that year.

2000 rule made various changes in the goal counting rules, as discussed below, and increased the Special Affordable Housing Goal to 20 percent for 2001–03.

In the December 1995 rule, the minimum special affordable multifamily subgoals for 1996–2000 were set at 0.8 percent of the total dollar volume of each GSE's mortgage purchases in 1994, or \$1.29 billion annually for Fannie Mae and \$0.99 billion annually for Freddie Mac. These subgoals were increased for 2001–03 in the October 2000 rule, to \$2.85 billion annually for Fannie Mae and

\$2.11 billion annually for Freddie Mac, or 1.0 percent of the average dollar volume of each GSE's mortgage purchases over the 1997–99 period.

Table C.1 and Figure C.1 show performance on the special affordable goal and the special affordable multifamily subgoal over the 1996–2002 period, based on HUD's analysis. The table shows that Fannie Mae surpassed the goals by 3.4 percentage points and 3.0 percentage points in 1996 and 1997, respectively, while Freddie Mac surpassed the goals by narrower margins, 2.0

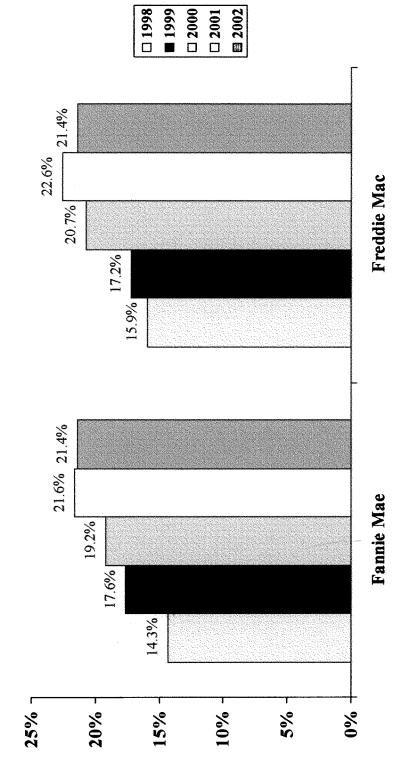
and 1.2 percentage points. In 1998 Fannie Mae's performance fell by 2.7 percentage points, while Freddie Mac's performance continued to rise, by 0.7 percentage point, thus for the first time Freddie Mac outperformed Fannie Mae on this goal. Freddie Mac showed a gain in performance to 17.2 percent in 1999, while Fannie Mae exhibited an even greater gain, to 17.6 percent.

Table C.1 GSEs' Performance on Special Affordable Goal, 1996-2002

	9661	1997	1998	1999	2000	2001*	2002*
Special Affordable Goal	12%	14%	14%	14%	14%	20%	20%
Multifamily Subgoal (in billions of \$):							
Fannie Mae	\$1.29	\$1.29	\$1.29	\$1.29	\$1.29	\$2.85	\$2.85
Freddie Mac	\$0.99	\$0.99	\$0.99	\$0.99	\$0.99	\$2.11	\$2.11
Fannie Mae: Units Eligible to Count Toward Goal	1,852,233	1,748,044	3,486,040	2,935,075	2,138,166	4,541,473	5,849,381
Special Affordable Units	285,642	296,366	499,948	517,169	411,239	979,168	1,252,871
Percent Special Affordable	15.4%	17.0%	14.3%	17.6%	19.2%	21.6%*	21.4%*
Special Affordable Multifamily Purchases	\$2.37	\$3.19	\$3.53	\$4.06	\$3.79	\$7.36	\$7.57
Ratio to Subgoal	1.84	2.47	2.74	3.15	2.94	2.58	2.66
Freddie Mac: Units Eligible to Count Toward Goal	1,299,589	1,175,271	2,658,174	2,228,906	1,580,868	3,238,781	4,275,957
Special Affordable Units	181,505	178,736	422,900	383,329	327,793	730,611	913,021
Percent Special Affordable	14.0%	15.2%	15.9%	17.2%	20.7%	22.6%*	21.4%*
Special Affordable Multifamily Purchases	\$1.06	\$1.21	\$2.69	\$2.26	\$2.40	\$4.65	\$5.22
Ratio to Subgoal	1.07	1.22	2.72	2.28	2.42	2.20	2.47

* Performance in 2001-2002 not directly comparable with performance in 1996-2000 due to changes in goal counting rules, as discussed in tex and shown in Table C.2.

Figure C.1
Special Affordable Mortgage Purchases



Special Affordable Goal was 14% of units financed for 1998-2000 and 20% for 2001 and 2002.

performance in 2001-02 is not strictly comparable with performance in 1998-2000, as discussed Source: HUD analysis of GSEs' loan-level data. Due to changes in goal counting procedures in 2001, in text.

Both GSEs exhibited sharp gains in goal performance in 2000-Fannie Mae's performance increased by 1.6 percentage points, to a record level of 19.2 percent, while Freddie Mac's performance increased even more, by 3.5 percentage points, which also led to a record level of 20.7 percent. Fannie Mae's performance was 21.6 percent in 2001 and 21.4 percent in 2002; Freddie Mac's performance was 22.6 percent in 2001 and 21.4 percent in 2002. However, as discussed below, using consistent accounting rules for 2000-02, each GSE's Special Affordable Housing Goal performance in 2001 was below its performance in 2000, and in 2002 each enterprise's performance was below its 2001 performance level.

With regard to the special affordable multifamily subgoal, Fannie Mae's purchases have exceeded the subgoal by wide margins in all years, with performance ranging from 184 percent of the goal in 1996 to 315 percent of the goal in 1999. Fannie Mae's subgoal was more than doubled in the October 2000 rule, to a minimum of \$2.85 billion in each year from 2001 through 2003, but its qualifying purchases amounted to \$7.36 billion, or 258 percent of the goal, in 2001, and \$7.57 billion, or 260 percent of the goal, in 2002.

Freddie Mac has also exceeded its special affordable multifamily subgoals in every year, albeit by smaller margins than Fannie Mae. In 1996 Freddie Mac's special affordable multifamily mortgage purchases amounted to \$1.06 billion, or 107 percent of the goal. This ratio rose to 122 percent in 1997, and exceeded 200 percent for each year from 1998 through 2000. Freddie Mac's subgoal was more than doubled in the October 2000 rule, to a minimum of \$2.11 in each year from 2001 through 2003, but its qualifying purchases amounted to \$4.65 billion, or 220 percent of the goal, in 2001, and \$5.22 billion, or 247 percent of the goal, in 2002.

The official figures for Freddie Mac's special affordable goal performance presented above differ from the corresponding figures presented by Freddie Mac in its Annual Housing Activity Reports to HUD by 0.1-0.2 percentage point for 1996-2000, reflecting minor differences in the application of counting rules. The official figures for special affordable goal performance by both GSEs are the same as those submitted by the enterprises for both GSEs for 2001, and for Fannie Mae for 2002. However, for 1996-2000, HUD's official special affordable goal performance figures for Fannie Mae were approximately 1-3 percentage points lower than the corresponding figures reported by the enterprise. This was due to differences between HUD and Fannie Mae in the application of counting requirements applicable to purchases of portfolios of seasoned loans, based on a statutory requirement that the proceeds of such GSE purchases by the loan sellers should be 'recycled" in order for the GSE to receive Special Affordable goal credit.3 This

discrepancy did not persist in 2001–02 because of a change in counting requirements, described below. And for 2002, HUD's official goal performance figure was 21.4 percent, somewhat above the figure of 20.6 percent submitted to the Department by Freddie Mac.

Fannie Mae's performance on the Special Affordable Housing Goal surpassed Freddie Mac's in 1996–97. This pattern was reversed in 1998, as Freddie Mac surpassed Fannie Mae in goal performance for the first time, though by only 0.2 percentage point. This improved relative performance of Freddie Mac was due to its increased purchases of multifamily loans, as it re-entered that market, and to increases in the goalqualifying shares of its single-family mortgage purchases. However, Fannie Mae again surpassed Freddie Mac in special affordable goal performance in 1999, 17.6 percent to 17.2 percent; Freddie Mac regained the lead in 2000, 20.7 percent to 19.2 percent. Freddie Mac's official performance also exceeded Fannie Mae's official performance in 2001, but this reflected a difference in the counting rules applicable to the two GSEs that was enacted by Congress; if the same counting rules were applied to both GSEs, Fannie Mae's performance would have exceeded Freddie Mac's performance, by 21.6 percent to 21.1 percent.

In 2002, Freddie Mac's performance on the special affordable goal was the same as Fannie Mae's performance (21.4 percent), even though Freddie Mac had the advantage of the Temporary Adjustment Factor, which did not apply to performance by Fannie Mae. Freddie Mac's performance would have trailed Fannie Mae's without this factor, and in fact Freddie Mac would have only slightly exceeded the goal, at 20.2 percent.

b. Changes in the Goal Counting Rules for 2001-03

Several changes in the counting rules underlying the calculation of special affordable goal performance took effect beginning in 2001. Most of these also applied to the low- and moderate-income goal and are discussed in Appendix A; only brief summaries of those changes are given here:

- Bonus points for multifamily and single-family rental properties. Each qualifying unit in a small multifamily property counted as two units in the numerator in calculating special affordable goal performance on all of the goals for 2001–03. And, above a threshold equal to 60 percent of the average number of qualifying rental units financed in owner-occupied properties over the preceding five years, each qualifying unit in a 2–4 unit owner-occupied property also counted as two units in the numerator in calculating goal performance.
- Freddie Mac's Temporary Adjustment Factor. Freddie Mac received a "Temporary

not take such steps; rather, Fannie Mae excluded such loans from the denominator in making its own calculations of its special affordable goal performance. In 1996–2000 HUD counted all eligible loans in the denominator, and, in the absence of measures to verify 'recycling' by Fannie Mae, did not award credit in the numerator of the special affordable goal for most of Fannie Mae's seasoned mortgage purchases.

- Adjustment Factor" of 1.35 units of credit for each qualifying unit financed in "large" multifamily properties (*i.e.*, those with 51 or more units) in the numerator in calculating special affordable goal performance for 2001–03.4 This factor did not apply to special affordable units in large multifamily properties whose mortgages were financed by Fannie Mae during this period.
- Missing data for single-family properties. The GSEs may exclude loans with missing borrower income from the denominator if the property is located in a below-median income census tract, subject to a ceiling of 1 percent of total owner-occupied units financed. The enterprises are also allowed to exclude single-family rental units with missing rental information from the denominator in calculating performance for the special affordable goal.
- Missing data and proxy rents for multifamily properties. If rent is missing for multifamily units, the GSEs may apply "proxy rents," up to a ceiling of 5 percent of total multifamily units financed, in determining whether such units qualify for the special affordable goal. If such proxy rents cannot be estimated, these multifamily units are excluded from the denominator in calculating performance under these goals.
- Change in "recycling" requirements. Under Section 1333(b)(1)(B) of FHEFSSA, if a GSE acquires a portfolio of mortgages originated in a previous year (that is, seasoned mortgages) that qualify under the Special Affordable Housing goal, the seller must be "engaged in a specific program to use the proceeds of such sales to originate additional loans that meet such goal" and such purchases or refinancings must "support additional lending for housing that otherwise qualifies under such goal" in order to receive credit toward the goal. This has been referred to as the "recycling requirement." The 2000 rule both clarified the conditions under which HUD would regard these statutory conditions to be satisfied and established certain categories of lenders that would be presumed to meet the recycling requirements. These included BIFinsured and SAIF-insured depository institutions that are regularly in the business of mortgage lending and which are subject to, and have received at least a satisfactory Community Reinvestment Act performance evaluation rating under specified conditions.5
- c. Effects of Changes in the Counting Rules on Goal Performance

Because of the changes in special affordable goal counting rules that took effect in 2001, direct comparisons between official goal performance in 2000 and 2001–02 are somewhat of an "apples-to-oranges comparison." For this reason, the Department has calculated what performance would have been in 2000 under the 2001–03 rules; this may be compared with official performance in 2001–02—an "apples-to-apples

³ During 1996–2000 Freddie Mac took steps to acquire representations and warranties from lenders to attest that they were "recycling" the proceeds from the sales of qualifying loans. Fannie Mae did

 $^{^4\}mathrm{See}$ Congressional Record, December 15, 2000, pp. H12295–96.

⁵ The revised requirements are codified at 24 CFR 81.14(e)(4). The changes are discussed in detail in the rule preamble, 68 FR 65074–76 (October 31, 2000).

comparison." HUD has also calculated what performance would have been in 2001-02 under the 1996-2000 rules; this may be

compared with official performance in 2000—an "oranges-to-oranges comparison."

These comparisons are presented in Table C.2.

Table C.2

Effects of Counting Rule Changes on the GSEs' Performance on the Special Affordable Goal

					ļ		Temporary	
			Technical		Bonus Points	Points	Adjustment	
GSE	Year	Baseline A*	Changes ¹	Baseline B*	Small MF ²	SF Rental ³	Factor (TAF)4	Baseline C*
Founie Mae	1000	1769	0 80%	18 50%	0000	090	V	10 3%
I diffic ivide	1777	9/ 9:11	0.00	20:01	2/7:0	20:0	4717	2/0:/1
	2000	19.2%	2.2%	21.4%	0.2%	0.5%	NA	22.2%
	2001	18.6%	1.6%	20.2%	0.4%	%6'0	NA	21.6%
	2002	18.6%	1.3%	19.9%	0.7%	0.9%	NA	21.4%
	Change, 2001-02	0.0%	-0.3%	-0.3%	0.3%	0.0%	NA	-0.2%
Freddie Mac	1999	17.2%	0.5%	17.4%	0.1%	0.4%	1.3%	19.2%
	2000	20.7%	0.3%	21.0%	0.1%	%9 '0	1.8%	23.4%
	2001	19.1%	0.2%	19.3%	1.1%	0.7%	1.4%	22.6%
	2002	18.4%	0.2%	18.6%	0.7%	0.9%	1.2%	21.4%
	Change, 2001-02	-0.7%	0.0%	-0.7%	-0.4%	0.2%	-0.2%	-1.2%

Details may not add to total due to rounding.

*Note: Baseline A represents performance under 1996-2000 scoring, thus figures for 1999-2000 in bold are official performance in those years. Baseline B adjusts Baseline A for technical changes in counting rules. Baseline C represents performance under 2001-03 scoring, thus figures for 2001 in bold are official performance in that year. Scoring of loans in this table is based on the 1990 Census and pre-2003 MSAs.

¹ Technical changes include credit for purchases of certain qualifying government-backed loans, exclusions of loans with missing information from the denominator in calculating performance, and the use of imputed or proxy rent for multifamily properties.

² Small multifamily bonus points: For 2001-03, every qualifying unit in a 5-50 unit multifamily property counts as two units in the numerator in calculating goal performance.

³ Single-family rental bonus points: Above a threshold, every qualifying unit in a 2-4 unit property in which one unit is owner-occupied and the other units are rental counts as two units in the numerator in calculating goal performance for 2001-03.

multifamily property counts as 1.35 units in calculating goal performance for Freddie Mac for 2001-03. This provision does not apply to goal ⁴ Temporary adjustment factor (TAF): In December 2000 Congress enacted a provision whereby every qualifying unit in a large (> 50 unit) performance for Fannie Mae.

Specifically, Table C.2 shows performance under the special affordable goal in three ways. Baseline A presents performance under the counting rules in effect for 1996-2000. Baseline B incorporates the technical changes in counting rules—changes in the treatment of missing data (including use of proxy rents), and changes in procedures related to the "recycling" requirement. Baseline C incorporates in addition to the technical changes the bonus points and, for Freddie Mac, the temporary adjustment factor. Baseline B corresponds to the counting approach proposed in this rule to take effect in 2005. Boldface figures under Baseline A for 1999-2000 and under Baseline C for 2001-02 indicate official goal performance based on the counting rules in effect in those years—e.g., for Freddie Mac, 17.2 percent in 1999, 20.7 percent in 2000, 22.6 percent in 2001, and 21.4 percent in 2002.

- Performance on the Special Affordable Housing Goal under 1996-2000 Counting Rules Plus Technical Changes. If the "Baseline B" counting approach had been in effect in 2000-02 and the GSEs' had purchased the same mortgages that they actually did purchase in those years, Fannie Mae would have surpassed the special affordable goal in both 2000 and 2001, but not in 2002, while Freddie Mac would have surpassed the goal in 2000 but fallen short in both 2001 and 2002. Specifically, Fannie Mae's performance would have been 21.4 percent in 2000, 20.2 percent in 2001, and 19.9 percent in 2002. Freddie Mac's performance would have been 21.0 percent in 2000, 19.3 percent in 2001, and 18.6 percent in 2002.
- Performance on the Special Affordable Housing Goal under 2001-2003 Counting Rules. If the 2001-03 counting rules had been in effect in 2000-02 and the GSEs' had purchased the same mortgages that they actually did purchase in that year (i.e., abstracting from any behavioral effects of "bonus points," for example), both GSEs would have substantially surpassed the special affordable goal in all three years, but both GSEs' performance figures would have deteriorated somewhat from 2000 to 2001 and also from 2001 to 2002. Specifically, Fannie Mae's "Baseline C" performance would have been 22.2 percent in 2000, 21.6 percent in 2001, and 21.4 percent in 2002. Freddie Mac's performance would have been 23.4 percent in 2000, 22.6 percent in 2001, and 21.4 percent in 2002. Measured on this consistent basis, then, Fannie Mae's performance fell by 0.6 percentage point in 2001 and 0.2 percentage point in 2002. Freddie Mac's "Baseline C" performance fell by 0.8 percentage point in 2001 and 1.2 percent in 2002. These reductions were primarily due to 2001-02 being years of heavy refinance activity.

Details of Effects of Changes in Counting Rules on Goal Performance in 2001–02. As discussed above, counting rule changes that took effect in 2001 had significant impacts on the performance of both GSEs on the special affordable goal in 2001—3.0 percentage points for Fannie Mae and 3.5 percentage points for Freddie Mac. This section breaks down the effects of these changes on goal performance for both GSEs; results are shown in Table C.2.

- Freddie Mac. The largest impact of the counting rule changes on Freddie Mac's goal performance was due to the application of the temporary adjustment factor for purchases of mortgages on large multifamily properties, as enacted by Congress; this added 1.4 percentage points to goal performance in 2001, as shown in Table C.2. Bonus points for purchases of mortgages on small multifamily properties added 1.1 percentage points to performance, and bonus points for purchase of mortgages on owneroccupied 2–4 unit rental properties added 0.7 percentage point to performance. The remaining impact (0.2 percentage point) was due to technical changes in counting rulesprimarily, the exclusion of single-family units with missing information from the denominator in calculating goal performance. Changes in the Department's counting rules related to "recycling" did not play a role in Freddie Mac's performance on the special affordable goal. These same patterns also generally appeared in 2002.
- Fannie Mae. The temporary adjustment factor applied to Freddie Mac's goal performance, but not to Fannie Mae's performance, thus counting rule changes had less impact on its performance than on Freddie Mac's performance in 2001. The largest impacts of the counting rule changes on Fannie Mae's goal performance were due to the application of bonus points for purchases of mortgages on owner-occupied 2-4 unit rental properties, which added 0.9 percentage point to performance; bonus points for purchases of mortgages on small multifamily properties, which added 0.4 percentage point to performance; and technical changes, which added 1.6 percentage points to performance—this included the change in the Department's rules regarding "recycling" and the exclusion of single-family units with missing information from the denominator in calculating goal performance. 6 The use of proxy rents for multifamily properties played a minor role in determining Fannie Mae's special affordable goal performance. These same patterns also appeared in 2002.
- d. Bonus Points for the Special Affordable Housing Goal

As discussed above and in Appendix A, the Department established "bonus points" to encourage the GSEs to step up their activity in 2001-03 in two segments of the mortgage market—the small (5-50 unit) multifamily mortgage market, and the market for mortgages on 2-4 unit properties where 1 unit is owner-occupied and 1-3 units are occupied by renters. Bonus points did not apply to purchases of mortgages for owneroccupied 1-unit properties, for investorowned 1-4 unit properties, and for large (>50-unit) properties, although as also discussed above, a "temporary adjustment factor" applied to Freddie Mac's purchases of qualifying mortgages on large multifamily properties.

Bonus points for small multifamily properties. Each unit financed in a small multifamily property that qualified for any of

the housing goals was counted as two units in the numerator (and one unit in the denominator) in calculating goal performance for that goal. For example, if a GSE financed a mortgage on a 40-unit property in which 10 of the units qualified for the special affordable goal, 20 units would be entered in the numerator and 40 units in the denominator for this property in calculating goal performance.

Fannie Mae financed 37,449 units in small multifamily properties in 2001 that were eligible for the special affordable goal, and 58,277 such units in 2002—a two-year increase of more than 700 percent from the 7,196 such units financed in 2000. Small multifamily properties also accounted for a greater share of Fannie Mae's multifamily business in 2001-02-7.4 percent of total multifamily units financed in 2001 and 13.2 percent in 2002, up from 2.5 percent in 2000. However, HUD's 2000 rule reported information from the 1991 Residential Finance Survey that small multifamily properties accounted for 37 percent of all multifamily units, thus Fannie Mae was still less active in this market than in the market for large multifamily properties.

Within the small multifamily market, there was no evidence that Fannie Mae targeted affordable properties to a greater extent in 2001–02 than in 2000. That is, 61 percent of Fannie Mae's small multifamily units qualified for the special affordable goal in 2000; this fell to 46 percent in 2001 and 52 percent in 2002.

Freddie Mac financed 50,299 units in small multifamily properties in 2001 that were eligible for the special affordable goal and 43,979 such units in 2002, a two-year increase of more than 1300 percent from the 2,996 such units financed in 2000. Small multifamily properties also accounted for a significantly greater share of Freddie Mac's multifamily business in 2001–02—16.0 percent of total multifamily units financed in 2001 and 13.2 percent in 2002, up from 1.8 percent in 2000.

Within the small multifamily market, there was some evidence that Freddie Mac targeted affordable properties to a greater extent in 2001 than in 2000. That is, 55 percent of Freddie Mac's small multifamily units qualified for the special affordable goal in 2000; this rose to 73 percent in 2001 and 64 percent in 2002.

In summary, then, there is evidence that bonus points for small multifamily properties had an impact on Fannie Mae's role in this market in 2001–02 and an even larger impact on Freddie Mac's role in this market. In addition, Fannie Mae has announced a program to increase its role in this market further in future years.⁷

Bonus points for single-family rental properties. Above a threshold, each unit financed in a 2–4 unit property with at least one owner-occupied unit (referred to as "OO24s" below) that qualified for any of the housing goals was counted as two units in the numerator (and one unit in the denominator) in calculating goal performance

⁶Exclusion of loans with missing information had a greater impact on Fannie Mae's goal performance than on Freddie Mae's goal performance.

^{7&}quot;Fannie Courting Multifamily Sellers; Small Banks Balking," American Banker, January 13, 2003, p. 1.

for that goal in 2001–03. The threshold was equal to 60 percent of the average number of such qualifying units over the previous five years. For example, Fannie Mae financed an average of 24,780 special affordable units in these types of properties between 1996 and 2000, and 55,118 such units in 2001. Thus Fannie Mae received 40,250 bonus points in this area in 2001—that is, 55,118 minus 60 percent of 24,780. So 95,368 units were entered in the numerator for these properties in calculating special affordable goal performance.

Fannie Mae financed 176,369 units in OO24s that were eligible for the special affordable goal in 2001 and 229,827 such units in 2002, a two-year increase of nearly 200 percent from the 77,985 such units financed in 2000. However, Fannie Mae's total single-family business increased at approximately the same rate as its OO24 business in 2001 and 2002, thus the share of this business accounted for by OO24s was the same in 2001–02 as in 2000—4 percent.

Within the OO24 market, there was no evidence that Fannie Mae targeted special affordable properties to a greater extent in 2001–02 than in 2000. That is, approximately 30 percent of Fannie Mae's OO24 units qualified for the special affordable goal in each of these three years.

Freddie Mac financed 96,204 units in OO24s that were eligible for the special affordable goal in 2001 and 146,242 such units in 2002, a two-year increase of nearly 200 percent from the 49,993 such units financed in 2000. However, Freddie Mac's total single-family business increased at approximately the same rate as its OO24 business between 2000 and 2002, thus the share of this business accounted for by OO24s was the same in 2002 as in 2000—4 percent.

As for Fannie Mae, within the OO24 market there was no evidence that Freddie Mac targeted special affordable properties to a greater extent in 2001–02 than in 2000. That is, approximately 36 percent of Freddie Mac's OO24 units qualified for the special affordable goal in each of these three years.

e. Effects of 2000 Census on Scoring of Loans Toward the Special Affordable Housing Goal

Background. Scoring of housing units under the Special Affordable Housing Goal is

based on data for mortgagors' incomes for owner-occupied units, rents for rental units, area median incomes, and, for units that are in the low-income but not the very low-income range, decennial census data used to determine whether the median income for the area where the property is located is in the low-income range. Specifically, for single-family owner-occupied units scoring is based on—

- The mortgagors' income at the time of mortgage origination
- The median income of an area specified in the same way as for the Low- and Moderate-Income Housing Goal, that is: (i) For properties located in Metropolitan Statistical Areas (MSAs) the area is the MSA; and (ii) for properties located outside of MSAs, the area is the county or the non-metropolitan portion of the State in which the property is located, whichever has the larger median income, as of the year of mortgage origination (which may be for the current year or a prior year).
- Also, if the property is located in a Metropolitan Statistical Area (MSA), the determination for purposes of the Special Affordable Housing Goal involves data on median income of the MSA; or if the property is located elsewhere, the median income of the county or the non-metropolitan portion of the State in which the property is located, whichever is larger, as of the most recent decennial census.

Analogous specifications to those detailed in Appendix A for the Low- and Moderate-Income Housing Goal are applied in the case of the Special Affordable Housing Goal for rental units in single-family properties with rent data available (assuming no income data available for actual or prospective tenants), for rental units in multifamily properties where rent data are available, and for rental units in multifamily properties where rent data are not available.

Thus, scoring loans under the Special Affordable Housing Goal requires a data series showing annual median incomes for MSAs, non-metropolitan counties, and the non-metropolitan portions of states; decennial census data on median incomes for census tracts; and decennial census data on median incomes for MSAs, non-metropolitan

counties, and the non-metropolitan portions of States. 8

For scoring loans purchased by the GSEs year-by-year from 1993 through 2002, area median income estimates produced by HUD's Economic and Market Analysis Division were used. The same median income data series described in Appendix A for the Low- and Moderate-Income Goal was used. The determination of low-income areas was based on 1990 census data.

2005 Procedure. Relative to the above procedure, scoring of loans purchased by the GSEs in and after 2005 will be affected by two factors—first, re-benchmarking of area median incomes to the 2000 census as described in Appendix A, with a shift from 1990 to 2000 census data for identifying low-income areas, and second, the Office of Management and Budget's June, 2003, respecification of MSA boundaries based on analysis of 2000 census data.⁹

Analysis. For purposes of specifying the level of the Special Affordable Housing Goal, the HUD estimates of area median incomes for MSAs, non-metropolitan counties, and the non-metropolitan parts of States, as described in Appendix A, were used in conjunction with the data identifying lowincome areas based on the 2000 census, to rescore loans purchased by the GSEs between 1999 and 2002. The same data series were used further in estimating the share of loans originated in metropolitan areas that would be eligible to score toward the Special Affordable Housing Goal, from HMDA data. The results of the retrospective GSE analysis are provided in Table C.3. The results of the GSE-HMDA comparative analysis are presented in the next section.

^{*}In New England, MSAs were defined through mid-2003 in terms of Towns rather than Counties, and the portion of a New England county outside of any MSA was regarded as equivalent to a county in establishing the metropolitan or non-metropolitan location of a property. The MSA definitions established by the Office of Management and Budget (OMB) in June, 2003 defined MSAs in New England in terms of counties.

⁹ HUD has deferred application of the 2003 MSA specification to 2005, pending completion of the present rulemaking process.

Table C.3

Effects of 2000 Census on Scoring Toward Special Affordable Housing Goal

	1999	2000	2001	2002
Fannie Mae:				
Benchmark*	18.5%	21.4%	20.2%	19.9%
With 2000 Re-benchmarking				
and 2000 Low-Income Areas	19.2%	22.6%	21.2%	20.7%
Adding 2003 MSAs	18.9%	22.1%	20.5%	19.8%
Freddie Mac:				
Benchmark*	17.4%	21.0%	19.3%	18.6%
With 2000 Re-benchmarking				
and 2000 Low-Income Areas	18.2%	21.8%	20.1%	19.0%
Adding 2003 MSAs	17.6%	21.1%	19.3%	17.9%

* Baseline B in Table C.2.

Table C.3 shows three sets of estimates for each GSE, based respectively on the counting rules in place in 2001–2002 (but disregarding the bonus points and Temporary Adjustment Factor), on the addition of 2000 census rebenchmarking and low-income areas, and finally on the further addition of 2003 MSA specification.

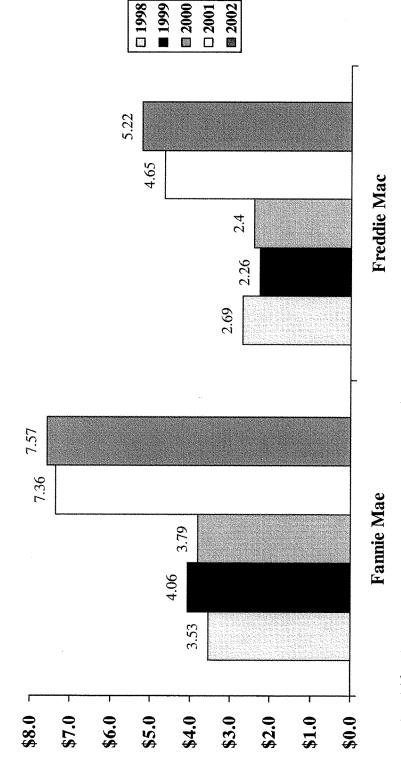
F. The GSEs' Multifamily Special Affordable Purchases

Since 1996 each GSE has been subject to an annual dollar-based subgoal for Special Affordable multifamily mortgage purchases, as discussed above. This subgoal was established for 1996–2000 as 0.8 percent of the total dollar volume of single-family and multifamily mortgages purchased by the respective GSE in 1994. Thus Fannie Mae's subgoal was \$1.29 billion per year and Freddie Mac's subgoal was \$988 million per year during that period. Fannie Mae surpassed the subgoal by \$1.08 billion, \$1.90 billion, \$2.24 billion, \$2.77 billion, and \$2.50 billion in 1996, 1997, 1998, 1999, and 2000 respectively, while Freddie Mac exceeded the subgoal by \$18 million, \$220 million, \$1.70 billion, \$1.27 billion, and \$1.41 billion.

The subgoal was established for 2001–03 as 1.0 percent of the average annual volume of

each GSE's total mortgage purchases over the 1997–99 period. Thus Fannie Mae's subgoal was established as \$2.85 billion per year and Freddie Mac's as \$2.11 billion per year. In 2001 Fannie Mae exceeded its subgoal by \$4.51 billion and Freddie Mac exceeded its subgoal by \$2.54 billion. In 2002, Fannie Mae exceeded its subgoal by \$4.72 billion and Freddie Mac exceeded its subgoal by \$3.11 billion. Those subgoals are also in effect for 2004. Table C.1 includes figures on subgoal performance, and they are depicted graphically in Figure C.2.

Multifamily Special Affordable Mortgage Purchases (Billions of Dollars Per Year) Figure C.2



per year for Freddie Mac for 1998-2000, and \$2.85 billion per year for Fannie Mae and \$2.11 billion Multifamily Special Affordable Goals were \$1.29 billion per year for Fannie Mae and \$988 million per year for Freddie Mac for 2001-02.

Source: HUD analysis of GSEs' loan-level data.

g. Characteristics of the GSEs' Special Affordable Purchases

The following analysis presents information on the composition of the GSEs' Special Affordable purchases according to area income, unit affordability, tenure of unit and property type (single- or multifamily).

Tables C.4 and C.5 show that each GSE's reliance on multifamily housing units to meet the special affordable goal has been

variable from year to year since 1996. Fannie Mae's multifamily purchases were at 37.7 percent in 1996 and 28.8 percent in 2001 with a high of 44.0 percent in 1997 and a low of 27.8 percent in 1998. Freddie Mac's multifamily purchases represented 29.4 percent of all purchases qualifying for the goal in 1996 and 27.0 percent in 2001, with a high of 31.5 percent in 1997 and a low of 21.6 percent in 1999. The two GSEs'

purchase percentages for single-family owner properties exhibited a similar variability through this entire period, as did their purchases of mortgages financing single-family rental units from 1996 through 2000. Both GSEs' high points for mortgages financing single-family rental units occurred in 2001: Fannie Mae's purchase percentage was 17.1 percent while Freddie Mac's was 17.2 percent.

Table C.4

Fannie Mae's Special Affordable Purchases
By Unit Affordability and Area Income, 1996-2002

Year of Purchase and Type of Unit	Very-Low Income Units in Low- Income Areas	Very-Low Income Units Outside Low- Income Areas	Other Low-Income Units in Low- Income Areas	Other Units Qualifying For Goal*	Total Units Qualifying For Goal	Percent
1996	25 102	02.020	22.220		141.460	40.50
Single-family owner Single-family rental	25,103	93,029	23,328		141,460	49.5%
Multifamily	11,242 23,703	18,207 59,556	6,938 15,399	9,136	36,387	12.7% 37.7%
Total	60,048	170,792	45.665	9,136	107,794 285,641	100.0%
Percent	21.0%	59.8%	16.0%	3.2%	100.0%	100.0%
	21.070	57.675	10.0%	5.270	100.070	
1997	** ***	24 422				
Single-family owner	23,909	91,400	20,825		136,134	45.9%
Single-family rental	9,169	15,290	5,399		29,858	10.1%
Multifamily	27,522	80,069	13,294	9,488	130,373	44.0%
Total	60,600	186,759	39,518	9,488	296,365	100.0%
Percent	20.4%	63.0%	13.3%	3.2%	100.0%	
1998						
Single-family owner	43,631	212,519	41,108		297,257	59.5%
Single-family rental	18,158	34,396	11,314		63,868	12.8%
Multifamily	34,481	74,417	19,799	10,126	138,822	27.8%
Total	96,270	321,332	72,221	10,126	499,947	100.0%
Percent	19.3%	64.3%	14.4%	2 0%	100 0%	
1999						
Single-family owner	41,943	205,048	36,366		283,357	54.8%
Single-family rental	21,161	38,663	12,063		71,887	13.9%
Multifamily	38,292	95,623	15,586	12,423	161,924	31.3%
Total	101,396	339,334	64,015	12,423	517,168	100.0%
Percent	19.6%	65.6%	12.4%	2.4%	100.0%	
2000						
Single-family owner	33,781	143,596	26,500		203,877	49.6%
Single-family rental	21,458	27,829	10,817		60,104	14.6%
Multifamily	31,200	91,160	12,250	12,648	147,258	35.8%
Total	86,439	262,585	49,567	12,648	411,239	100.0%
Percent	21.0%	63.9%	12.1%	3.1%	100.0%	
2001						
Single-family owner	79,563	349,042	66,861		495,466	54.1%
Single-family rental	52,893	75,465	27,816		156,174	17.1%
Multifamily	62,449	145,919	35,496	20,216	264,080	28.8%
Total	194,905	570,426	130,173	20,216	915,720	100.0%
Percent	21.3%	62.3%	14.2%	2.2%	100 0%	100.070
	21.570	02.070	K 1120 70		200074	
2002	107 502	406 601	06 061	*	601.125	59.9%
Single-family owner	107,583	496,681	86,861		691,125	20.0%
Single-family rental	76,216	111,582	43,056	12.000	230,854	
Multifamily	60,058	126,710	30,289	13,988	231,045	20.0% 100.0%
Total	243,857 21.1%	734,973 63.7%	160,206 13.9%	13,988 1.2%	1,153,024 100.0%	100.0%
Percent	21.1%	03.1%	15.9%	1.2%	100.0%	

^{*}Low-income rental units in multifamily properties where at least 20 percent of the units are affordable to families whose incomes are 50 percent of area median income or less or where at least 40 percent of the units are affordable to families whose incomes are 60 percent of area median income or less, which do not otherwise qualify under the goal.

Table C.5

Freddie Mac's Special Affordable Purchases
By Unit Affordability and Area Income, 1996-2002

Year of purchase and	Very-Low Income Units in Low-	Very-Low Income Units Outside Low-	Other Low-Income Units in Low-	Other Units Qualifying	Total Units Qualifying	Percent
Type of unit	Income Areas	Income Areas	Income Areas	For Goal*	For Goal	1 0100111
1996						***************************************
Single-family owner	15,330	70,731	16,018		102,080	56.2%
Single-family rental	7,539	14,339	4,178		26,056	14.4%
Multifamily	12,634	28,301	8,760	3,675	53,370	29.4%
Total	35,503	113,371	28,956	3,675	181,506	100.0%
Percent	19.6%	62.5%	16.0%	2.0%	100.0%	
1997						
Single-family owner	15,742	66,656	15,449		97,847	54.7%
Single-family rental	7,469	11,612	5,552		24,633	13.8%
Multifamily	16,131	28,789	8,133	3,203	56,256	31.5%
Total	39,342	107,057	29,134	3,203	178,736	100.0%
Percent	22.0%	59.9%	16.3%	1.8%	100.0%	
1998						
Single-family owner	40,690	176,846	33,869		251,404	59.4%
Single-family rental	14,665	28,691	7,364		50,720	12.0%
Multifamily	30,736	63,272	21,609	5,159	120,776	28.6%
Total	86,091	268,809	62,842	5,159	422,900	100.0%
Percent	20.4%	63.6%	14.9%	1.2%	100.0%	
1999						
Single-family owner	37,675	168,684	31,452		237,810	62.0%
Single-family rental	18,054	33,305	11,179		62,538	16.3%
Multifamily	20,969	46,765	10,001	5,247	82,982	21.6%
Total	76,698	248,754	52,632	5,247	383,330	100.0%
Percent	20.0%	64.9%	13.7%	1.4%	100.0%	
2000						
Single-family owner	35,718	133,527	25,639		194,884	59.5%
Single-family rental	16,781	26,542	10,212		53,535	16.3%
Multifamily	19,769	45,414	8,327	5,865	79,375	24.2%
Total	72,268	205,483	44,178	5,865	327,794	100.0%
Percent	22.0%	62.7%	13.5%	1.8%	100.0%	
2001						
Single-family owner	54,008	249,431	45,014		348,453	55.8%
Single-family rental	31,375	56,855	19,030		107,260	17.2%
Multifamily	48,265	87,375	23,882	9,231	168,753	27.0%
Total	133,648	393,661	87,926	9,231	624,466	100.0%
Percent	21.4%	63.0%	14.1%	1.5%	100.0%	
2002						
Single-family owner	77,100	342,640	61,355		481,095	61.5%
Single-family rental	40,279	71,176	30,487		141,942	18.1%
Multifamily	38,370	86,633	25,674	9,004	159,681	20.4%
Total	155,749	500,449	117,516	9,004	782,718	100.0%
Percent	19.9%	63.9%	15.0%	1.2%	100.0%	

^{*} Low-income rental units in multifamily properties where at least 20 percent of the units are affordable to families whose incomes are 50 percent of area median income or less or where at least 40 percent of the units are affordable to families whose incomes are 60 percent of area median income or less, which do not otherwise qualify under the goal

income families (shown in the two leftmost columns in the tables) accounted for 80.8 percent of Fannie Mae's units qualifying under the goal in 1996, rising to 83.6 percent in 2001. For Freddie Mac, very-low-income families accounted for 82.1 percent of units qualifying under the goal in 1996, rising to 84.4 percent in 2001. In contrast, mortgage purchases from low-income areas (shown in the first and third columns in the tables) accounted for 37.0 percent of Fannie Mae's units qualifying under the goal in 1996, compared to 35.5 percent in 2001. The corresponding percentages for Freddie Mac were 35.6 percent in 1996 and 35.5 percent in 2001. Thus given the definition of special

affordable housing in terms of household and area income characteristics, both GSEs have consistently relied substantially more on low-income characteristics of households than low-income characteristics of census tracts to meet this goal.

h. The GSEs' Performance Relative to the Market

Section E.9 in Appendix A uses HMDA data and GSE loan-level data for home purchase mortgages on single-family-owner properties in metropolitan areas to compare the GSEs' performance in special affordable lending to the performance of depositories and other lenders in the conventional

conforming market. (See Tables A.13 to A.16 in Appendix A.). There were two main findings with respect to the special affordable category. First. Freddie Mac and Fannie Mae have historically lagged depositories and the overall market in providing mortgage funds for special affordable borrowers. Between 1993 and 2002, 11.8 percent of Freddie Mac's mortgage purchases were for special affordable borrowers, 12.7 percent of Fannie Mae's purchases, 15.4 percent of loans originated by depositories, and 15.4 percent of loans originated in the conventional conforming market (without estimated B&C loans). For the recent years, the GSE-market comparisons are as follows:

Year	Feddie Mac (percent)	Fannie Mae (percent)	Market (w/o B&C) (percent)
1999	12.8	12.5	17.0
2000	14.7	13.3	16.8
2001	14.4	14.9	15.6
2002	15.8	16.3	16.3
1996-2002 (average)	12.8	13.5	16.0
1999–2002 (average)	14.5	14.4	16.4
2001–2002 (average)	15.1	15.6	16.0

During the period between 1999 and 2002, both GSEs' performance was at approximately 88 percent of the market—special affordable loans accounted for 14.4 percent of Fannie Mae's purchases, 14.5 percent of Freddie Mac's purchases, and 16.4 percent of loans originated in the conforming market.

Second, while both GSEs have improved their performance over the past few years, Fannie Mae has been made more progress than Freddie Mac in closing its gap with the market. During the first two years (2001 and 2002) of HUD's new housing goal targets, the average share of Fannie Mae's purchases going to special affordable loans was 15.6 percent, which was close to the market average of 16.0 percent. The share of Freddie Mac's purchases going to special affordable loans was 15.1 percent during this period.

Section G in Appendix A discusses the role of the GSEs both in the overall special affordable market and in the different segments (single-family owner, single-family rental, and multifamily rental) of the special affordable market. The GSEs' special affordable purchases accounted for 35 percent of all special affordable owner and

rental units that were financed in the conventional conforming market between 1999 and 2002. The GSEs' 35-percent share of the special affordable market was twothirds of their 49-percent share of the overall market. Even in the owner market, where the GSEs account for 57 percent of the market, their share of the special affordable market was only 49 percent during this period. While the GSEs improved their market shares during 2001 and 2002, this analysis shows that the GSEs have not been leading the single-family market in purchasing loans that qualify for the Special Affordable Goal. There is room and ample opportunities for the GSEs to improve their performance in purchasing affordable loans at the lower-income end of the market. Section C.3 of this appendix discusses a home purchase subgoal designed to place the GSEs in such a leadership position in the special affordable singlefamily-owner market.

Factor 3. National Housing Needs of Low-Income Families in Low-Income Areas and Very-Low-Income Families

This discussion concentrates on very-low-income families with the greatest needs. It

complements Section C of Appendix A, which presents detailed analyses of housing problems and demographic trends for lower-income families which are relevant to the issue addressed in this part of Appendix C.

Data from the American Housing Survey demonstrate that housing problems and needs for affordable housing continue to be more pressing in the lowest-income categories than among moderate-income families, as established in HUD's analysis for the 1995 and 2000 Final Rules. Table C.6 displays figures on several types of housing problems-high housing costs relative to income, physical housing defects, and crowding-for both owners and renters. Figures are presented for households experiencing multiple (two or more) of these problems as well as households experiencing a severe degree of either cost burden or physical problems. Housing problems in 2001 continued to be much more frequent for the lowest-income groups. 10 Incidence of problems is shown for households in the income range covered by the special affordable goal, as well as for higher income households.

Table C.6
Incidence of Housing Problems by
Household Income, 2001

	Household Income as a Percent of Area Median Income, 2001			
	0-60%	61-80%	81-100%	>100%
Renter Households (Thousands)	<u> </u>	01-00 70	81-10076	>100 %
Total	17,892	4,413	3,619	8,118
Rent Burden > 50% of income	6,238	112	77	27
31-50% of income	5,344	927	368	277
Severely Inadequate Housing	774	108	92	206
Moderately Inadequate	1,616	281	199	442
Crowded	1,151	206	121	196
Multiple Problems*	2,084	106	36	60
Priority Problems**	6,740	217	170	233
As Percent of Total				
Rent Burden > 50% of income	34.9%	2.5%	2.1%	0.3%
31-50% of income	29.9%	21.0%	10.2%	3.4%
Severely Inadequate Housing	4.3%	2.4%	2.6%	2.5%
Moderately Inadequate	9.0%	6.4%	5.5%	5.4%
Crowded	6.4%	4.7%	3.4%	2.4%
Multiple Problems*	11.6%	2.4%	1.0%	0.7%
Priority Problems**	37.7%	4.9%	4.7%	2.9%
Owner Households (Thousands)				
Total	18,432	7,510	7,631	38,792
Cost Burden > 50% of income	5,624	550	321	391
31-50% of income	4,208	1,814	1,517	2,446
Severely Inadequate Housing	389	102	127	336
Moderately Inadequate	874	260	179	694
Crowded	436	122	162	259
Multiple Problems*	821	139	104	80
Priority Problems**	5,908	636	449	728
As Percent of Total				
Cost Burden > 50% of income	30.5%	7.3%	4.2%	1.0%
31-50% of income	22.8%	24.2%	19.9%	6.3%
Severely Inadequate Housing	2.1%	1.4%	1.7%	0.9%
Moderately Inadequate	4.7%	3.5%	2.3%	1.8%
Crowded	2.4%	1.6%	2.1%	0.7%
Multiple Problems*	4.5%	1.8%	1.4%	0.2%
Priority Problems**	32.1%	8.5%	5.9%	1.9%

^{*} Two or three of the following: housing costs > 30%, severe or moderate physical problems, and overcrowding.

^{**} Housing costs > 50% of income or severely inadequate housing among unassisted households. Note: Incomes of renter households are estimated based on rents, adjusted for number of bedrooms.

This analysis shows that priority problems of severe cost burden or severely inadequate housing are noticeably concentrated among renters and owners with incomes below 60 percent of area median income: 30.5 percent of renter households and 34.9 percent of owner households had priority problems. In contrast, in the next higher income range, up to 80 percent of area median income, 2.5 percent of renter households and 7.3 percent of owner households had priority problems. The table demonstrates the significance of affordability problems: Sixty-five percent of very-low-income renter families had rent burden over 30 percent of income; 35 percent had rent burden over 50 percent of income. Thirteen percent had moderately or severely inadequate housing; 6 percent lived in crowded conditions, defined as more than one person per room.

Factor 4. The Ability of the Enterprises To Lead the Industry in Making Mortgage Credit Available for Low-Income and Very-Low-Income Families

The discussion of the ability of Fannie Mae and Freddie Mac to lead the industry in Section G of Appendix A is relevant to this factor—the GSEs' roles in the owner and rental markets, their role in establishing widely-applied underwriting standards, their role in the development of new technology for mortgage origination, their strong staff resources, and their financial strength. Additional analyses of the potential ability of the enterprises to lead the industry in the low- and very-low-income market appears below in Section D, which explains the Department's rationale for the home purchase subgoal for Special Affordable loans.

Factor 5. The Need To Maintain the Sound Financial Condition of the GSEs

HUD has undertaken a separate, detailed economic analysis of this final rule, which includes consideration of (a) the financial returns that the GSEs earn on special affordable loans and (b) the financial safety and soundness implications of the housing goals. Based on this economic analysis, HUD concludes that the housing goals in this final rule raise minimal, if any, safety and soundness concerns.

C. Determination of the Special Affordable Housing Goal

Several considerations, many of which are reviewed in Appendixes A and B and in previous sections of this Appendix, led to the determination of the Special Affordable Housing Goal, the multifamily special affordable subgoal, and the special affordable subgoal for home purchase loans on single-

family-owner properties in metropolitan areas.

1. Severe Housing Problems

The data presented in Section C.3 demonstrate that housing problems and needs for affordable housing are much more pressing in the lowest-income categories than among moderate-income families. The high incidence of severe problems among the lowest-income renters reflects severe shortages of units affordable to those renters. At incomes below 60 percent of area median, 34.7 percent of renters and 21.6 percent of owners paid more than 50 percent of their income for housing. In this same income range, 65.6 percent of renters and 42.4 percent of owners paid more than 30 percent of their income for housing. In addition, 31.5 percent of renters and 23.8 percent of owners exhibited "priority problems", meaning housing costs over 50 percent of income or severely inadequate housing. Homeownership gaps and other disparities in the housing and mortgage markets discussed in Section H of Appendix A also apply to Special Affordable housing and mortgages.

2. GSE Performance and the Market

a. The GSEs' Special Affordable Housing Goals Performance

In the October 2000 rule, the special affordable goal was set at 20 percent for 2001-03. Effective on January 1, 2001, several changes in counting requirements came into effect for the special affordable goal, as follows: (a) "Bonus points" (double credit) for purchases of mortgages on small (5–50 unit) multifamily properties and, above a threshold level, mortgages on 2-4 unit owner-occupied properties; (b) a "temporary adjustment factor" (1.35 unit credit) for Freddie Mac's purchases of mortgages on large (more than 50 unit) multifamily properties; (c) changes in the treatment of missing data; (d) a procedure for the use of imputed or proxy rents for determining goal credit for multifamily mortgages; and (e) changes regarding the "recycling" of funds by loan originators. Fannie Mae's performance in 2001 was 21.6 percent and Freddie Mac's performance was 22.6 percent, thus both GSEs surpassed this higher goal.

Counting requirements (a) and (b) expired at the end of 2003 while (c)—(e) will remain in effect after that. If this counting approach—without the bonus points and the "temporary adjustment factor"—had been in effect in 2000–2002, and the GSEs' had purchased the same mortgages that they actually did purchase in both years, then Fannie Mae's performance would have been 21.4 percent in 2000, 20.2 percent in 2001,

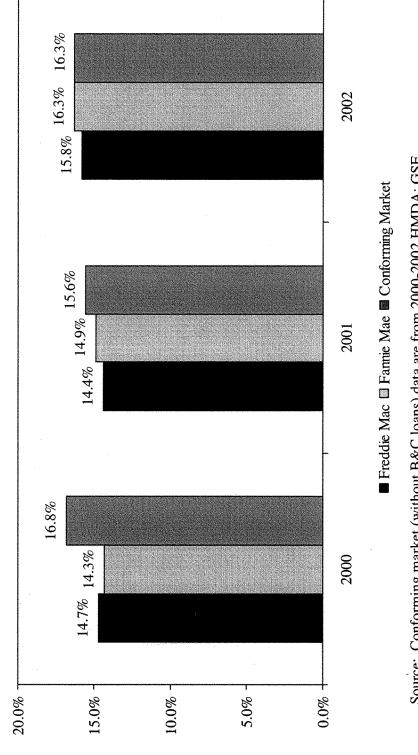
and 19.9 percent in 2002. Freddie Mac's performance would have been 21.0 percent in 2000, 19.3 percent in 2001, and 18.6 percent in 2002. Fannie Mae would have surpassed the special affordable goal in both 2000 and 2001 while Freddie Mac would have surpassed the goal in 2000 and fallen short in 2001.

The above performance figures are for the special affordable goal defined in terms of 1990 Census geography. Switching to 2000 Census data slightly increases the coverage of special affordable goal, which increases the special affordable share of the GSEs' purchases by up to one percentage point. Based on 2000 Census geography, and excluding counting requirements (a) and (b), then Fannie Mae 's performance would have been 21.7 percent in 2000, 20.1 percent in 2001, and 19.4 percent in 2002. Freddie Mac's performance would have been 20.8 percent in 2000, 19.1 percent in 2001, and 17.8 percent in 2002.

b. Single-Family Market Comparisons in Metropolitan Areas

The Special Affordable Housing Goal is designed, in part, to ensure that the GSEs maintain a consistent focus on serving the very low-income portion of the housing market where housing needs are greatest. Section C compared the GSEs' performance in special affordable lending to the performance of depositories and other lenders in the conventional conforming market for single-family home loans. The analysis showed that while both GSEs have improved their performance, they have historically lagged depositories and the overall market in providing mortgage funds for very low-income and other special affordable borrowers. Between 1999 and 2002, special affordable borrowers accounted for 14.4 percent of the home loans purchased by Fannie Mae, 14.5 percent of Freddie Mac's purchases, 16.4 percent of home loans originated by depositories, and 16.4 percent of all home loans originated in the conventional conforming market (without B&C loans). Section C also noted that while both GSEs have improved their performance over the past few years, Fannie Mae has made more progress than Freddie Mac in closing its gap with the market. During the first two years (2001 and 2002) of HUD's new housing goal targets, the average share of Fannie Mae's purchases going to special affordable loans was 15.6 percent, which was close to the market average of 16.0 percent. The share of Freddie Mac's purchases going to special affordable loans was 15.1 percent during this period. (See Figure C.3.) BILLING CODE 4210-27-P

Special Affordable Shares of Conventional Conforming Market Originations and GSE Purchases, 2000-2002 Figure C.3



data are from loan-level data reported to HUD. Data are for single-family home purchase loans in Source: Conforming market (without B&C loans) data are from 2000-2002 HMDA; GSE metropolitan areas. See Table A.15 for further explanation.

BILLING CODE 4210-27-C

3. Ability To Lead the Single-Family Owner Market: A Special Affordable Sub Goal

The Secretary believes the GSEs can play a leadership role in the special affordable market. Thus, the Department is proposing to establish a subgoal of 17 percent for each GSE's purchases of home purchase loans for special affordable families in the singlefamily-owner market of metropolitan areas for 2005, rising to 18 percent in 2006, and 19 percent in both 2007 and 2008. The purpose of this subgoal is to encourage the GSEs to improve their purchases of mortgages for very-low-income and minority first-time homebuyers who are expected to enter the housing market over the next few years. If the GSEs meet this goal, they will be leading the primary market by approximately one-half percentage point in 2005 and 2.5 percentage points by 2007 and 2008, based on the income characteristics of home purchase loans reported in HMDA. HMDA data show that special affordable families accounted for an average of 16.4 percent of single-family owner loans originated in the conventional conforming market of metropolitan areas between 1999 and 2002—the special affordable market share was 16.0 percent for both the longer 1996-2002 period and the shorter 2001-2002 period. Loans in the B&C portion of the subprime market are not included in these averages. As explained in Appendix D, HUD also projected special affordable shares for the market for 1999 to 2002 using the new 2000 Census geography and the new OMB specifications. For special affordable loans, the 1999-2002 market average using these projected data was also 16.4 percent.

To reach the proposed 17-percent subgoal for 2005, both GSEs will have to improve their performance—Fannie Mae by 2.6 percentage points over its average performance of 14.4 percent between 1999 and 2002, by 1.4 percentage points over its average performance of 15.6 percent during 2001 and 2002, and by 0.7 percentage point over its 16.3 percent performance in 2002; and Freddie Mac by 2.5 percentage points over its average performance of 14.5 percent between 1999 and 2002, by 1.9 percentage points over its average performance of 15.1 percent during 2001 and 2002, and by 1.2 percentage point over its 15.8 percent performance in 2002. By 2007-2008 the required increases in subgoal performance over past performance will be 2 percentage points higher than the increases cited in the preceding sentence. For example, Fannie Mae would have to increase its performance by 2.7 percentage points over its 16.3 percent performance in 2002; and Freddie Mac would have to increase its performance by 3.2 percentage points over its 15.8 percent performance in 2002. The special affordable performances of Fannie Mae and Freddie Mac were also projected to take into account the new 2000 Census geography and the new OMB specifications. On average, the results with the new data were similar to the old data, but the differential was higher during 2002. For home purchase loans, the 1999-2002 average performance for Fannie Mae was 14.3 percent with the projected data, versus 14.4 percent with the historical data;

the largest difference was in 2002, when Fannie Mae's performance was 15.8 percent with the projected data, compared with 16.3 percent with the historical data. The 1999–2002 average performance for Freddie Mac was 14.1 percent with the projected data, versus 14.5 percent with the historical data; the largest difference was also in 2002, when Freddie Mac's performance was 15.1 percent with the projected data, compared with 15.8 percent with the historical data. Thus, the increases in each GSE's performance needed to meet the proposed special affordable home purchase subgoal in 2005–08 will be slightly higher than those noted above.

The approach taken is for the GSEs to obtain their leadership position by staged increases in the special affordable subgoal; this will enable the GSEs to take new initiatives in a correspondingly staged manner to achieve the new subgoal each year. Thus, the increases in the special affordable subgoal are sequenced so that the GSEs can gain experience as they improve and move toward the new higher subgoal targets.

The subgoal applies only to the GSEs' purchases in metropolitan areas because the HMDA-based market benchmark is only available for metropolitan areas. HMDA data for non-metropolitan counties are not reliable enough to serve as a market benchmark. The Department is also setting home purchase subgoals for the other two goals-qualifying categories, as explained in Appendices A and B. Sections E.9 and G of Appendix A provide additional information on the opportunities for an enhanced GSE role in the special affordable segment of the home purchase market and on the ability of the GSEs to lead that market.

The preamble and Appendix A discuss in some detail the factors that the Department considered when setting the subgoal for low- and moderate-income loans. Several of the considerations were general in nature—for example, related to the GSEs' overall ability to lead the single-family-owner market— while others were specific to the low-mod subgoal. Because the reader can refer to Appendix A, this appendix provides a briefer discussion of the more general factors. The specific considerations that led to the subgoal for special affordable loans can be organized around the following four topics:

(1) The GSEs have the ability to lead the market. As discussed in Appendix A, the GSEs have the ability to lead the primary market for single-family-owner loans, which is their "bread-and-butter" business. Both GSEs have been dominant players in the home purchase market for years, funding 57 percent of the single-family-owner mortgages financed between 1999 and 2002. Through their many new product offerings and their various partnership initiatives, the GSEs have shown that they have the capacity to reach out to very-low-income and other special affordable borrowers. They also have the staff expertise and financial resources to make the extra effort to lead the primary market in funding single-family-owner mortgages for special affordable borrowers.

(2) The GSEs have lagged the market. Even though they have the ability to lead the market, they have not done so. While the

GSEs have significantly improved their performance, according to numerous studies by the Department and independent researchers, they have historically lagged the primary market in providing funds for special affordable borrowers (see above GSEmarket comparisons). The type of improvement needed to meet this new special affordable subgoal was demonstrated by Fannie Mae during 2001 and 2002. Between 2000 and 2001, special affordable loans declined as a percentage of Freddie Mac's purchases (from 14.7 to 14.4 percent) and as a percentage of primary market originations (from 16.8 to 15.6 percent), but they increased as a percentage of Fannie Mae's purchases (from 13.3 to 14.9 percent). During 2002, Fannie Mae further increased its special affordable share (from 14.9 percent tin 2001 to 16.3 percent in 2002), placing it at the market level. This subgoal is designed to encourage Fannie Mae as well as Freddie Mac to lead the special affordable market.

(3) Disparities in Homeownership and Credit Access Remain. There remain troublesome disparities in our housing and mortgage markets, even after the "revolution in affordable lending" and the growth in homeownership that has taken place since the mid-1990s. The homeownership rate for African-American and Hispanic households remains 25 percentage points below that of white households. Minority families face many barriers in the mortgage market, such as lack of capital for down payment and lack of access to mainstream lenders (see above). Immigrants and minorities-many of whose very-low-income levels will qualify them as special affordable—are projected to account for almost two-thirds of the growth in the number of new households over the next ten years. As emphasized in Appendix A, changing population demographics will result in a need for the primary and secondary mortgage markets to meet nontraditional credit needs, respond to diverse housing preferences, and overcome information and other barriers that many immigrants and minorities face. The GSEs have to increase their efforts in helping special affordable families—but so far they have played a surprisingly small role in serving minority first-time homebuyers. It is estimated that the GSEs accounted for 46.5 percent of all (both government and conventional) home loans originated between 1999 and 2001; however, they accounted for only 14.3 percent of home loans originated for African-American and Hispanic first-time homebuyers. A subgoal for special affordable home purchase loans should increase the GSEs' efforts in important sub-markets such as the one for minority first-time homebuyers.

(4) There are ample opportunities for the GSEs to improve their performance. Special affordable mortgages are available for the GSEs to purchase, which means they can improve their performance and lead the primary market in purchasing loans for these very-low-income borrowers. Sections B, C, and I of Appendix A and Section H of Appendix D explain that the special affordable lending market has shown an underlying strength over the past few years that is unlikely to vanish (without a

significant increase in interest rates or a decline in the economy). The special affordable share of the home purchase market has averaged 16.0 percent since 1996 and annually has ranged from 15.0 percent to 17.0 percent. Second, the market share data reported in Table A.30 of Appendix A demonstrate that there are newly-originated loans available each year for the GSEs to purchase. The GSEs' purchases of singlefamily owner loans represented 57 percent of all single-family-owner loans originated between 1999 and 2002, compared with 49 percent of the special affordable loans that were originated during this period. Thus, half of the special affordable conforming market is not touched by the GSEs. As noted above, the situation is even more extreme for special sub-markets such the minority first-time homebuyer market where the GSEs have only a minimal presence. Between 1999 and 2001, the GSEs purchased only 33 percent of conventional conforming loans originated for minority first-time homebuyers, even though they purchased 57 percent of all home loans originated in the conventional conforming market during that period. But also important, the GSEs' purchases under the subgoal are not limited to new mortgages that are originated in the current calendar year. The GSEs can purchase loans from the substantial, existing stock of special affordable loans held in lenders' portfolios, after these loans have seasoned and the GSEs have had the opportunity to observe their payment performance. In fact, based on Fannie Mae's recent experience, the purchase of seasoned loans appears to be one useful strategy for purchasing goals-qualifying loans.

To summarize, although single-familyowner mortgages comprise the "bread-andbutter" of their business, the GSEs have lagged behind the primary market in financing special affordable loans. For the reasons given above, the Secretary believes that the GSEs can do more to raise the special affordable shares of the home loans they purchase on single-family-owner properties. This can be accomplished by building on efforts that the enterprises have already started, including their new affordable lending products aimed at special groups such as first-time homebuyers, their many partnership efforts, their outreach to inner city neighborhoods, their incorporation of greater flexibility into their underwriting guidelines, and their purchases of seasoned CRA loans. A wide variety of quantitative and qualitative indicators indicate that the GSEs' have the resources and financial strength to improve their special affordable performance enough to lead the market.

4. Size of the Overall Special Affordable Mortgage Market

As detailed in Appendix D, single-family and multifamily special affordable mortgages are estimated to account for 24–28 percent of the dwelling units financed by conventional conforming mortgages; in estimating the size of the market, HUD used alternative assumptions about future economic and market affordability conditions that were less favorable than those that existed over the past several years. Between 1999 and 2002,

the special affordable market averaged 28 percent. HUD is well aware of the volatility of mortgage markets and the possible impacts on the GSEs' ability to meet the housing goals. Should conditions change such that the goals are no longer reasonable or feasible, the Secretary has the authority to revise the goals.

5. The Special Affordable Housing Goal for 2005–2008

The proposed Special Affordable Housing Goal for 2005 is 22 percent of eligible purchases, a two percentage point increase over the current goal of 20 percent, with the proposed goal rising to 24 percent in 2006. 26 percent in 2007, and 28 percent in 2008. The bonus points for small multifamily properties and owner-occupied 2-4 units, as well as Freddie Mac's Temporary Adjustment Factor, will no longer be in effect for goal counting purposes. It is recognized that neither GSE would have met the 22-percent target in the past three years. Under the new counting rules, Fannie Mae's special affordable performance is estimated to have been 18.6 percent in 1999, 21.7 percent in 2000, 20.1 percent in 2001, and 19.4 percent in 2002—Fannie Mae would have to increase its performance in 2005 by 2.0 percentage points over its average (unweighted) performance of 20.0 percent over these last four years. By 2008 this increase relative to average 1999-2002 performance would be 8.0 percentage points. Freddie Mac's performance is projected to have been 17.4 percent in 1999, 20.8 percent in 2000, 19.1 percent in 2001, and 17.8 percent in 2002-Freddie Mac would have to increase its performance in 2005 by 3.2 percentage points over its average (unweighted) performance of 18.8 percent over these last four years. By 2008 this increase relative to average 1999-2002 performance would be 9.2 percentage points. As explained in Appendix D, the Special Affordable market averaged 28 percent between 1999 and 2002. Thus, the GSEs should be able to improve their performance enough to meet the proposed targets of 22 percent in 2005, 24 percent in 2006, 26 percent in 2007, and 28 percent in 2008

The objective of HUD's proposed Special Affordable Goal is to bring the GSEs performance to the upper end of HUD's market range estimate for this goal (24-28 percent), consistent with the statutory criterion that HUD should consider the GSEs' ability to lead the market for each Goal. To enable the GSEs to achieve this leadership, the Department is proposing modest increases in the Special Affordable Goal for 2005 which will increase further, year-byyear through 2008, to achieve the ultimate objective for the GSEs to lead the market under a range of foreseeable economic circumstances by 2008. Such a program of staged increases is consistent with the statutory requirement that HUD consider the past performance of the GSEs in setting the Goals. Staged annual increases in the Special Affordable Goal will provide the enterprises with opportunity to adjust their business models and prudently try out business strategies, so as to meet the required 2008 level without compromising other business objectives and requirements.

Section C compared the GSEs' role in the overall market with their role in the special affordable market. The GSEs' purchases provided financing for 23,580,594 dwelling units, which represented 49 percent of the 48,270,415 single-family and multifamily units that were financed in the conventional conforming market between 1999 and 2002. However, in the special affordable part of the market, the 4,595,201 units that were financed by GSE purchases represented only 35 percent of the 13,232,549 dwelling units that were financed in the market. Thus, there appears to ample room for the GSEs to improve their performance in the special affordable market. In addition, there are several market segments (e.g., first-time homebuyers) that would benefit from a greater secondary market role by the GSEs, and special affordable borrowers are concentrated these markets.

6. Multifamily Special Affordable Subgoals

Based on the GSEs' past performance on the special affordable multifamily subgoals, and on the outlook for the multifamily mortgage market, HUD is proposing that these subgoals be retained and increased for the 2005-2008 period. Unlike the overall goals, which are expressed in terms of minimum goal-qualifying percentages of total units financed, these subgoals for 2001-03 and in prior years have been expressed in terms of minimum dollar volumes of goalqualifying multifamily mortgage purchases. Specifically, each GSE's special affordable multifamily subgoal is currently equal to 1.0 percent of its average total (single-family plus multifamily) mortgage volume over the 1997-99 period. Under this formulation, in October 2000 the subgoals were set at \$2.85 billion per year for Fannie Mae and \$2.11 billion per year for Freddie Mac, in each of calendar years 2001 through 2003. These represented increases from the goals for 1996-2000, which were \$1.29 billion annually for Fannie Mae and \$0.99 billion annually for Freddie Mac. These subgoals are also in effect for 2004

HUD's Determination. The multifamily mortgage market and both GSEs' multifamily transactions volume grew significantly over the 1993–2001 period, indicating that both enterprises have provided increasing support for the multifamily market, and that they have the ability to continue to provide further support for the market.

Specifically, Fannie Mae's total eligible multifamily mortgage purchase volume increased from \$4.6 billion in 1993 to \$12.5 billion in 1998, and then jumped sharply to \$18.7 billion in 2001 and \$18.3 billion in 2002. Its special affordable multifamily mortgage purchases followed a similar path, rising from \$1.7 billion in 1993 to \$3.5 billion in 1998 and \$4.1 billion in 1999, and also jumping sharply to \$7.4 billion in 2001 and \$7.6 billion in 2002. As a result of its strong performance, Fannie Mae's purchases have been at least twice its minimum subgoal in every year since 1997—247 percent of the subgoal in that year, 274 percent in 1998, 315 percent in 1999, 294 percent in 2000, and, under the new higher subgoal level, 258 percent in 2001, and 266 percent in 2002.

Freddie Mac's total eligible multifamily mortgage purchase volume increased even more sharply, from \$0.2 billion in 1993 to \$6.6 billion in 1998, and then jumped sharply in 2001 to \$11.8 billion and \$13.3 billion in 2002. Its special affordable multifamily mortgage purchases followed a similar path, rising from \$0.1 billion in 1993 to \$2.7 billion in 1998, and also jumping sharply to \$4.6 billion in 2001 and \$5.2 billion in 2002. As a result of its strong performance, Freddie Mac's purchases have also been at least twice its minimum subgoal in every year since 1998-272 percent of the subgoal in that year, 229 percent in 1999, 243 percent in 2000, and, under the new higher subgoal level, 220 percent in 2001, and 247 percent in 2002.

The Special Affordable Housing Multifamily Subgoals set forth in this proposed rule are reasonable and appropriate based on the Department's analysis of this market. The Department's decision to retain the multifamily subgoal is based on the fact that HUD's analysis indicates that multifamily housing still serves the housing needs of lower-income families and families in low-income areas to a greater extent than single-family housing. By retaining the multifamily subgoal, the Department ensures that the GSEs continue their activity in this market, and that they achieve at least a minimum level of special affordable multifamily mortgage purchases that are affordable to lower-income families. The Department proposes to establish each GSE's special affordable multifamily subgoal as 1.0 percent of its average annual dollar volume of total (single-family and multifamily) mortgage purchases over the 2000-2002 period. In dollar terms, the Department's proposal is \$5.49 billion per year in special affordable multifamily mortgage purchases for Fannie Mae, and \$3.92 billion per year in special affordable multifamily mortgage purchases for Freddie Mac. These subgoals would be less than actual special affordable multifamily mortgage purchase volume in 2001 and 2002 for both GSEs; thus the Department believes that they would be feasible for the 2005-2008 period.

7. Conclusion

HUD has determined that the Special Affordable Housing Goal in this proposed rule addresses national housing needs within the income categories specified for this goal, while accounting for the GSEs' past performance in purchasing mortgages meeting the needs of very-low-income families and low-income families in lowincome areas. HUD has also considered the size of the conventional mortgage market serving very-low-income families and lowincome families in low-income areas Moreover, HUD has considered the GSEs' ability to lead the industry as well as their financial condition. HUD has determined that a Special Affordable Housing Goal of 22 percent in 2005, 24 percent in 2006, 26 percent in-2007, and 28 percent in 2008 is both necessary and achievable. HUD has also determined that a multifamily special affordable subgoal for 2005-2008 set at 1.0 percent of the average of each GSE's respective dollar volume of combined (single-family and multifamily) 1999-2001 mortgage purchases in is both necessary and

achievable. Finally, HUD is proposing to establish a subgoal of 17 percent for the GSEs' purchases of single-family-owner mortgages that qualify for the special affordable goal and are originated in metropolitan areas, for 2005, with this subgoal rising to 18 percent in 2006, and 19 percent in both 2007 and 2008. The Secretary has considered the GSEs' ability to lead the industry as well as the GSEs' financial condition. The Secretary has determined that the proposed goals, the proposed multifamily subgoals, and the proposed single-family-owner subgoals are necessary and appropriate.

Appendix D—Estimating the Size of the Conventional Conforming Market for Each Housing Goal

A. Introduction

In establishing the three housing goals, the Secretary is required to assess, among a number of factors, the size of the conventional market for each goal. This appendix explains HUD's methodology for estimating the size of the conventional market for each of the three housing goals. Following this overview, Section B summarizes the main components of HUD's market-share model and identifies those parameters that have a large effect on the relative market shares. Sections C and D discuss two particularly important market parameters, the size of the multifamily market and the share of the single-family mortgage market accounted for by singlefamily rental properties. Section E provides a more systematic presentation of the model's equations and main assumptions. Sections F, G, and H report HUD's estimates for the Lowand Moderate-Income Goal, the Underserved Areas Goal, and the Special Affordable Housing Goal, respectively.

In developing this rule, HUD has followed the same basic approach that it followed in the last two GSE rules. HUD has carefully reviewed existing information on mortgage activity in order to understand the weakness of various data sources and has conducted sensitivity analyses to show the effects of alternative parameter assumptions. HUD is well aware of uncertainties with some of the data and much of this appendix is spent discussing the effects of alternative assumptions about data parameters and presenting the results of an extensive set of sensitivity analyses.

In an earlier critique of HUD's market share model, Blackley and Follain (1995, 1996) concluded that conceptually HUD had chosen a reasonable approach to determining the size of the mortgage market that qualifies for each of the three housing goals. Blackley and Follain correctly note that the challenge lies in getting accurate estimates of the

model's parameters. In their comments on the 2000 Proposed GSE Rule, both Fannie Mae and Freddie Mac stated that HUD's market share model (outlined in Section B below) was a reasonable approach for estimating the goals-qualifying (low-mod, special affordable, and underserved areas) shares of the mortgage market. Freddie Mac stated:

We believe the Department takes the correct approach in the Proposed Rule by examining several different data sets, using alternative methodologies, and conducting sensitivity analysis. We applaud the Department's general approach for addressing the empirical challenges.²

Similarly, Fannie Mae stated that "HUD has developed a reasonable model for assessing the size of the affordable housing market".³

However, both GSEs have criticized HUD's implementation of its market methodology. Their major criticisms and HUD's responses to their criticisms can be found in Section B of Appendix D of the 2000 Final Rule. HUD recognizes that there is no single, perfect data set for estimating the size of the affordable lending market and that available data bases on different sectors of the market must be combined in order to implement its market share model (as outlined in Section B below). As this appendix will show, HUD has carefully combined various mortgage market data bases in a manner which draws on the strength of each in order to implement its market methodology and to arrive at a reasonable range of estimates for the three goals-qualifying shares of the mortgage market. In this appendix, HUD demonstrates the robustness of its market estimates by reporting the results of numerous sensitivity analyses that examine a range of assumptions about the relative importance of the rental and owner markets and the goals-qualifying shares of the owner portion of the mortgage market.

This appendix reviews in some detail HUD's efforts to combine information from several mortgage market data bases to obtain reasonable values for the model's parameters. The next section provides an overview of HUD's market share model.

B. Overview of HUD's Market Share Methodology ⁴

1. Definition of Market Share

The size of the market for each housing goal is one of the factors that the Secretary is required to consider when setting the level

¹ Dixie M. Blackley and James R. Follain, "A Critique of the Methodology Used to Determine Affordable Housing Goals for the Government Sponsored Housing Enterprises," unpublished report prepared for Office of Policy Development and Research, Department of Housing and Urban Development, October 1995; and "HUD's Market Share Methodology and its Housing Goals for the Government Sponsored Enterprises," unpublished paper, March 1996.

² See Freddie Mac, "Comments on Estimating the Size of the Conventional Conforming Market for Each Housing Goal: Appendix III to the Comments of the Federal Home Loan Mortgage Corporation on HUD's Regulation of the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac)", May 8, 2000, page 1.

³ See Fannie Mae, "Fannie Mae's Comments on HUD's Regulation of the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac)", May 8, 2000, page 53.

⁴ Readers not interested in this overview may want to proceed to Section C, which begins the market analysis by examining the size of the multifamily market.

of each housing goal.⁵ Using the Low- and Moderate-Income Housing Goal as an example, the market share in a particular year is defined as follows:

Low- and Moderate-Income Share of Market: The number of dwelling units financed by the primary mortgage market in a particular calendar year that are occupied by (or affordable to, in the case of rental units) families with incomes equal to or less than the area median income divided by the total number of dwelling units financed in the conforming conventional primary mortgage market.

There are three important aspects to this definition. First, the market is defined in terms of "dwelling units" rather than, for example, "value of mortgages" or "number of properties." Second, the units are "financed" units rather than the entire stock of all mortgaged dwelling units; that is, the marketshare concept is based on the mortgage flow in a particular year, which will be smaller than total outstanding mortgage debt. Third, the low- and moderate-income market is expressed relative to the overall conforming conventional market, which is the relevant market for the GSEs.6 The low- and

moderate-income market is defined as a percentage of the conforming market; this percentage approach maintains consistency with the method for computing each GSE's performance under the Low- and Moderate-Income Goal (that is, the number of low- and moderate-income dwelling units financed by GSE mortgage purchases relative to the overall number of dwelling units financed by GSE mortgage purchases).

2. Three-Step Procedure

Ideally, computing the low- and moderateincome market share would be straightforward, consisting of three steps:

Step 1: Projecting the market shares of the four major property types included in the conventional conforming mortgage market, i.e.—

- (a) Single-family owner-occupied dwelling units (SF–O units);
- (b) Rental units in 2–4 unit properties where the owner occupies one unit (SF 2–4 units); ⁷
- (c) Rental units in one-to-four unit investor-owned properties (SF Investor units); and.
- (d) Rental units in multifamily (5 or more units) properties (MF units).8

Step 2: Projecting the "goal percentage" for each of the above four property types (for example, the "Low- and Moderate-Income Goal percentage for single-family owner-occupied properties" is the percentage of those dwelling units financed by mortgages in a particular year that are occupied by households with incomes below the area median).

Step 3: Multiplying the four percentages in (2) by their corresponding market shares in (1), and summing the results to arrive at an estimate of the overall share of dwelling units financed by mortgages that are occupied by low- and moderate-income families.

The four property types are analyzed separately because of their differences in low- and moderate-income occupancy. Rental properties have substantially higher percentages of low- and moderate-income occupants than owner-occupied properties. This can be seen in the top portion of Table D.1, which illustrates Step 3's basic formula for calculating the size of the low- and moderate-income market. In this example, low- and moderate-income dwelling units are estimated to account for 53.9 percent of the total number of dwelling units financed in the conforming mortgage market.

⁵ Sections 1332(b)(4), 1333(a)(2), and 1334(b)(4).

⁶So-called "jumbo" mortgages, greater than \$300,700 in 2002 for 1-unit properties, are excluded in defining the conforming market. There is some overlap of loans eligible for purchase by the GSEs with loans insured by the FHA and guaranteed by the Veterans Administration.

⁷The owner of the SF 2–4 property is counted in (a)

⁸ Property types (b), (c), and (d) consist of rental units. Property types (b) and (c) must sometimes be combined due to data limitations; in this case, they are referred to as "single-family rental units" (SF–R units).

⁹The property shares and low-mod percentages reported here are based on one set of model assumptions; other sets of assumptions are discussed in Section E.

Table D.1

Illustration of Market Share Calculations

	Low- a	nd Moderate-Income	e Market
Property Type	(Step 1) Share of Market (Percent)	(Step 2) Low-Mod Share (Percent)	(Step 3) Multiply (1) x (2) (Percent)
(a) SF-Owner	72.2	40.0	28.9
(b) SF-2-4 Rental	2.0	90.0	1.8
(c) SF Investor	10.8	90.0	9.7
(d) MF	15.0	90.0	13.5
Total Low-Mod Market	100.0		53.9

	Ur	nderserved Areas Mar	rket ¹
Property Type	(Step 1) Share of Market (Percent)	(Step 2) Underserved Areas Share (Percent)	(Step 3) Multiply (1) x (2) (Percent)
(a) SF-Owner	72.2	26.0	18.8
(b) SF-2-4 Rental	2.0	42.5	0.9
(c) SF Investor	10.8	42.5	4.6
(d) MF	15.0	48.0	7.2
Total Underserved Areas Market	100.0		31.4

¹ This example assumes a 1990-Census-based definition of underserved areas. As discussed in section G, underserved areas in terms of 2000 Census geography increases the "underserved area shares" in step 2 by about six percentage points.

To examine the other housing goals, the "goal percentages" in Step 2 would be changed and the new "goal percentages" would be multiplied by Step 1's property distribution, which remains constant. For example, the Underserved Areas Goal ¹⁰ would be derived as illustrated in the bottom portion of Table D.1. In this example, units eligible under the Underserved Areas Goal are estimated to account for 31.4 percent of the total number of dwelling units financed in the conforming mortgage market. ¹¹

3. Data Issues

Unfortunately, complete and consistent mortgage data are not readily available for carrying out the above three steps. A single data set for calculating either the property shares or the housing goal percentages does not exist. However, there are several major data bases that provide a wealth of useful information on the mortgage market. HUD combined information from the following sources: the Home Mortgage Disclosure Act (HMDA) reports, the American Housing Survey (AHS), HUD's Survey of Mortgage Lending Activity (SMLA), Property Owners and Managers Survey (POMS) and the Census Bureau's Residential Finance Survey (RFS). In addition, information on the mortgage market was obtained from the Mortgage Bankers Association, Fannie Mae, Freddie Mac and other organizations.

Property Shares. To derive the property shares, HUD started with forecasts of singlefamily mortgage originations (expressed in dollars). These forecasts, which are available from the GSEs and industry groups such as the Mortgage Bankers Association, do not provide information on conforming mortgages, on owner versus renter mortgages, or on the number of units financed. Thus, to estimate the number of single-family units financed in the conforming conventional market, HUD had to project certain market parameters based on its judgment about the reliability of different data sources. Sections D and E report HUD's findings related to the single-family market.

Total market originations are obtained by adding multifamily originations to the singlefamily estimate. Because of the wide range of estimates available, the size of the multifamily mortgage market turned out to be one of the most controversial issues raised during the initial rule-making process during 1995; this was also an issue that the GSEs focused on in their comments on the 2000 proposed rule. Because most renters qualify under the Low- and Moderate-Income Goal, the chosen market size for multifamily can have a substantial effect on the overall estimate of the low- and moderate-income market (as well as on the estimate of the special affordable market). Thus, it is important to consider estimates of the size of the multifamily market in some detail, as Section C does. In addition, given the

uncertainty surrounding estimates of the multifamily mortgage market, it is important to consider a range of market estimates, as Sections F–H do.

Goal Percentages. To derive the goal percentages for each property type, HUD relied heavily on HMDA, AHS, and POMS data. For single-family-owner originations, HMDA provides comprehensive information on borrower incomes and census tract locations for metropolitan areas. Unfortunately, it provides no information on the incomes of renters living in mortgaged properties (either single-family or multifamily) or on the rents (and therefore the affordability) of rental units in mortgaged properties. The AHS, however, does provide a wealth of information on rents and the affordability of the outstanding stock of single-family and multifamily rental properties. An important issue here concerns whether rent data for the stock of rental properties can serve as a proxy for rents on newly-mortgaged rental properties. During the 2000 rule-making process, POMS data were used to examine the rents of newlymortgaged rental properties; thus, the POMS data supplements the AHS data. The data base issues as well as other technical issues related to the goal percentages (such as the need to consider a range of mortgage market environments) are discussed in Sections F, G, and H, which present the market share estimates for the Low- and Moderate-Income Goal, the Underserved Areas Goal, and the Special Affordable Goal, respectively.

4. Conclusions

HUD is using the same basic methodology for estimating market shares that it used in 1995 and 2000. As demonstrated in the remainder of this appendix, HUD has attempted to reduce the range of uncertainty around its market estimates by carefully reviewing all known major mortgage data sources and by conducting numerous sensitivity analyses to show the effects of alternative assumptions. Sections C, D, and E report findings related to the property share distributions called for in Step 1, while Sections F, G, and H report findings related to the goal-specific market parameters called for in Step 2. These latter sections also report the overall market estimates for each housing goal calculated in Step 3.

In considering the levels of the goals, HUD carefully examined past comments by the GSEs and others on the methodology used to establish the market share for each of the goals. Based on that thorough evaluation, as well as HUD's additional analysis for this Proposed Rule, HUD concludes that its basic methodology is a reasonable and valid approach to estimating market shares. As in the past, HUD recognizes the uncertainty regarding some of these estimates, which has led the Department to undertake a number of sensitivity and other analyses to reduce this uncertainty and also to provide a range of market estimates (rather than precise point estimates) for each of the housing goals.

C. Size of the Conventional Multifamily Mortgage Market ¹²

This section provides estimates of (a) the annual dollar volume of conventional multifamily mortgage originations and (b) the annual average loan amount per unit financed. The estimates build on research reported in the Final Rule on HUD's Regulation of Fannie Mae and Freddie Mac as published in the **Federal Register** on October 31, 2000, especially in Appendix D. That material from the 2000 Rule will not be repeated here but will be referenced or summarized where appropriate.

The section uses the information on dollar volume of multifamily originations and average loan amounts to estimate the number of multifamily units financed each year as a percentage share of the total (both singlefamily and multifamily) number of dwelling units financed each year; the years covered include 1991 to 2002. This percentage share, called the "multifamily mix", is an important parameter in HUD's projection model of the mortgage market for 2005–08.

Estimating this "multifamily mix" is important because relative to its share of the overall housing market, the multifamily rental sector has disproportionate importance for the housing goals established for Fannie Mae and Freddie Mac. This is because most multifamily rental units are occupied by households with low or moderate incomes. In 2001, for example, Freddie Mac purchased mortgages on approximately 3.5 million housing units, of which only 12 percent were multifamily rental units. However, of Freddie Mac's purchases qualifying as mortgages on low- and moderate-income housing, fully 25 percent of the units financed were multifamily rental units. Fannie Mae's experience is similar. Ten percent of all housing units on which mortgages were purchased in 2001 were multifamily rental units, but 21 percent of the units with qualifying mortgages were multifamily rentals.

The methods used in the 2000 Rule for estimating the size of the multifamily mortgage market and related variables were the product of extensive research by HUD and review by interested parties. The approach here is first to extend those estimates through 2002 using the same methods as in the 2000 Rule, and then to present alternative methods, along with commentary.

1. Data Sources

The data sources available for estimating the size of the multifamily mortgage market are more limited in scope and timeliness than was the case for the 2000 Rule. Among the key sources described in detail in the 2000 Rule, the following are now less useful:

Survey of Mortgage Lending Activity. This survey has been discontinued; estimates are available only through 1997.

Residential Finance Survey: The 1991 Residential Finance Survey (RFS) is now 13 years out of date.

Urban Institute Statistical Model: This model, developed in 1995 and calibrated

 $^{^{10}\,\}mathrm{This}$ goal will be referred to as the "Underserved Areas Goal".

¹¹The example in Table D.1 is based on 1990 Census tract geography. As explained in Section G, switching to 2000 Census tract geography (scheduled for 2005) increases the underserved areas market share by approximately five percentage points.

 $^{^{12}}$ This section is based on analysis by Jack Goodman under contract with the Urban Institute.

using data from 1975-1990, is now even further removed from its calibration period and probably captures current market conditions less well.

Estimates from the GSEs: As part of their comments on the proposed 2000 Rule, Fannie Mae and Freddie Mac shared with HUD their own estimates of the size of the multifamily mortgage market.

Fortunately, several key sources are available with the timeliness and quality comparable to the sources used during development of the 2000 Rule. These sources are: the Home Mortgage Disclosure Act (HMDA); activity reports submitted to HUD and the Office of Federal Enterprise Oversight (OFHEO) by Fannie Mae and Freddie Mac; non-GSE mortgage-backed security issuance from the Commercial Mortgage Alert database; and multifamily mortgage activity by life insurance companies, as estimated by the American Council of Life Insurers (ACLI). For background information on each of these sources, readers are referred to Appendix D of the 2000 Rule.

2. Estimates Based on "HUD New" Methodology

In the 2000 Rule, HUD developed a new methodology for estimating aggregate multifamily conventional loan originations. The method, here labeled "HUD New", was developed to make full use of the available data, and in particular the four sources listed above, which encompass most of the multifamily mortgage market.

The advantages of HUD New are that it provides reasonably complete coverage of the market, produces those estimates within nine months of the end of the year, generally includes only current originations and avoids double counting. The main disadvantage of HUD New is that it produces a lower bound estimate. Some loan originators are missed, including pension funds, government entities at the federal, state, and local levels, real estate investment trusts, and some mortgage bankers. Also excluded are loans made by private individuals and partnerships. In addition to these exclusions, estimates from the covered lenders require some judgmental adjustments to conform to the definitions and time intervals of HUD New.

Despite these limitations, HUD New is one sound way to estimate the size of the multifamily conventional mortgage market. The method requires unavoidable judgment calls on which analysts will differ. However, due to the reasonableness of the HUD New approach, the value of maintaining continuity in estimation methods, and the fact that no data has become available in the past few years that would argue for modifying HUD New, it is used here for the baseline estimate of the size of the conventional multifamily mortgage market in 2000, 2001 and 2002.

The estimates from HUD New are presented in Table D.2. This table is the counterpart of Table D.5 in the 2000 Rule. The historical years have two columns each, one for the estimates presented in the 2000 Rule and one for estimates independently produced as part of this research. Footnotes to the table provide more complete descriptions of the components. Additional background on the calculations is provided in the 2000 Rule (Appendix D, Section C).

Table D.2

Estimated Multifamily Conventional Origination Volume, 1995-2002

New HUD Methodology
(\$ millions)

		١.									-			
	1995	ł	9661	1996г	1997	1997r	1998	1998r	, 6661	1999r	, 2000	2000r	- 1	2002 (New)°
Fannie Mae	\$ 3,322	\$ 3,327	\$ 4,315	\$ 4,322	\$ 4,370	\$ 4,378	\$ 7,644	\$ 7,657	\$ 6,697	\$ 6,708	\$ 5,641	\$ 6,953		\$ 11,129
Freddie Mac ¹	1,047	1,049	1,491	1,493	7,136	1,501	2,615	2,620	4,803	4,811	5,096	4,040		7,140
CMBS multifamily ²	0	n/a	4,436	4,436	1,499	7,136	15,677	15,677	10,805	10,805	8,271	7,221	9,244	7,892
HMDA-ponfolio3	15,714	15,714	17,321	17,321	18,521	18,521	22,485	22,485	19,336	23,359	19,162	21,840		35,454
Life insurance companies4	3,072	4,419	4,115	4,115	4,403	4,403	4,465	4,465	2,865	2,865	3,805	2,094		680'9
Private pension funds ⁵	427	427	812	812	835	835								
St. & local retirement funds ⁵	228	228	197	161	228	228								
Federal credit agencies ⁵	627	627	404	404	408	408								
St. & local credit agencies ⁵	358	358	1,394	1,394	840	840								
Total	24,795	26,149	34,484	34,493	38,240	38,250	52,886	52,904	44,505	48,547	41,976	42,148	58,979	67,704

¹ Source: OFHEO, 2002 Annual Report, Tables 1 and 11. Includes cash purchases from lenders plus lender-originated securitizations; excludes non-GSE securities and repurchased GSE securities. Figures in OFHEO tables are reduced here by 33 percent to adjust for seasoned and government-insured loans, as explained in the 2000 Rule.

² Commercial Mortgage Alert (CMA) database. Excludes agency, bank, thrift, insurance company, foreign, and seasoned securitizations.

HMDA tabulation by HUD; includes conventional multifamily loans originated by depositories but not sold, plus conventional multifamily loans acquired by depositories but not sold, less overlap.

^{*} Source: American Council of Life Insurers, Mortgage Commitments Survey; figures are loan commitments from Q4 of previous year plus commitments in first three quarters of current years (to approximate the time lag from loan commitment to origination).

⁵ Source: Survey of Mortgage Lending Activity.

⁶ HMDA figure projected based on 1998 HMDA in conjunction with 1998-1999 change in transactions volume for GSE and CMBS market segments.

⁷ Estimate based on partial-year data.

⁸ CMBS estimate based on partial-year data.

The revisions to the historical estimates result from both revisions to some of the input data and recalculations. For the years 1995 through 1998, the revisions are small for the estimates of total originations. The only one of note is a 5 percent upward revision to the estimate for 1995, prompted by a recalculation of the entry for life insurance companies. The revision to 1999 is larger, and results mostly from the substitution of the actual HMDA results for that year for the projected value used in the 2000 Rule. Surprisingly, the revised estimate for 2000 based on complete data for that year only varies slightly from the projection made at the time of the 2000 Rule.

Most of the historical estimates produced in 2000 can be replicated or closely approximated, including those for Fannie and Freddie, CMBS, HMDA, and life insurance companies. The replicability of the CMBS figures is especially heartening, in light of all the selection criteria and hand calculations required to generate those estimates from the CMBS database. (In the 2000 Rule, the estimates for Freddie Mac and CMBS originations in 1997 appear to have been switched, and the revised estimates make this correction.)

The revised figures for 1999 and 2000 indicate that total conventional originations dropped 8 percent in 1999 from 1998's very strong level and another 13 percent in 2000. However, the HUD New estimate indicates that total conventional originations then jumped 40 percent in 2001 and further increased 15 percent in 2002. Judging from Survey of Mortgage Lending Activity estimates since 1970, the 2002 number is a new record high. For 2002, most of the increased volume is due to increases by HMDA lenders and life insurance companies.

One possible concern is that the significant increase in the HMDA number in 2002 was caused by the FFIEC relaxing its eligibility

requirements between 2001 and 2002. This concern turns out to be unfounded. The FFIEC actually raised its eligibility requirements. The level of assets required by FFIEC to be reported to HMDA increased from \$31 million in 2001 to \$32 million in 2002. In addition, the number of HMDA reporters decreased from 7,771 in 2001 to 7,638 in 2002.

3. An Alternative Method

The HUD New method makes use of all the available sources of data on individual origination sources in attempting to estimate total conventional mortgage originations. However, as discussed in the 2000 Rule and summarized above, unavoidable gaps in coverage make the resulting HUD New figures lower-bound estimates of actual originations rather than best "point" estimates. In addition, even for those loans that are available, certain assumptions must be made to convert the available data into estimates corresponding to the desired definition and time periods.

An alternative to the bottom-up approach of HUD New avoids some of the data problems. The Federal Reserve's Flow of Funds accounts provide the most complete and timely set of estimates of multifamily mortgage credit. The Flow of Funds statistics refer to net changes in credit outstanding rather than gross originations. Specifically, balance sheet estimates of mortgage assets of lenders are used to produce estimated changes in holdings of mortgages over time. An alternative label for the resulting time series is "net change in mortgage debt outstanding."

The historical relationship between gross originations and net change can be used to estimate recent origination volume. Separate information on FHA multifamily activity can be used to convert the total originations to estimates of only conventional originations.

The Flow of Funds method that is described in this section will be called "FoF-based."

Flow of Funds estimates of mortgage debt outstanding are based on data from sources of varying accuracy and timeliness. Bank and thrift institution holdings, taken from regulatory filings, are by all accounts highly accurate, as are those from the government sponsored agencies and direct Federal government holdings. The private MBS data and the life insurance company figures, both taken from Wall Street sources, are also thought to be reasonably accurate. Less accurate are the estimates of loans made by private individuals and certain institutions, for which comprehensive data on loans outstanding is provided only once every ten years, through the Residential Finance Survey. Fortunately, the depository institutions, GSEs, and mortgage-backed securities account for the bulk of all holdings of mortgage debt (approximately 72 percent, according to the Flow of Funds estimates for year-end 2001).

The net change in mortgage debt outstanding in any year is the lower bound on originations. This is because the net change is defined as originations less the sum of principal repayments and charge offs. Historically loan originations have exceeded the net change by a considerable margin in both the multifamily and single-family markets. There are several reasons why the relationship of originations to net change differs between the multifamily and single-family sectors, but the basic principles apply to both sectors.

Table D.3 presents the annual estimates from the Flow of Funds. Also shown are the estimates of multifamily conventional originations as published in Table D.10 from the 2000 rule, and FHA originations from HUD administrative records.

Table D.3

Multifamily Mortgage Lending

Memo: Ten-Year Treasury Yield	Ann. Avg. Less	Avg. of Previous	Five Yrs (% Points)	-0.3	-0.5	-1.4	-2.3	-0.5	-0.7	-0.4	-0.2	-1.2	-0.7	0.0	6.0-	-1.1
Memo: Ten-		Annual	Average (%)	9.8	7.9	7.0	5.9	7.1	9.9	6.4	6.4	5.3	5.7	0.9	5.0	4.6
			D-A	N/A	27.9	39.3	36.4	34.5	30.6	26.6	29.8	26	19 (14)	(10)	23	22
			D/A	N/A	-6.2	-2.2	-7.3	70.0	5.8	3.1	3.4	1.8	I.5 (1.4)	1.5 (1.3)	1.5	1.5
(D)	Ē	Total	Originations	N/A	24	27	32	35	37	39	42	58	56 (51)	56 (47)	71	99
(C)		FHA	Originations	_	1	2		3	3	4	4	4	4	4	5	4.5
(B)	Conventional	Mortgage	Originations	N/A	23	25	29	32	34	35	38	54	52 (47)	52 (43)	29	62
(A)	Net Change in	Mortgage Debt	Outstanding	-1.4	-3.9	-12.3	4.4	0.5	6.4	12.4	12.2	31.5	37.4	37.3	48.3	44.2
			Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002

Sources and Notes:

Italics in Columns B and D indicate estimates not appearing in the 2000 Rule. Numbers in parentheses are estimates from the 2000 Rule.

Columns A through D are in billions of dollars.

Columns A is from Federal Reserve Board Flow of Funds Accounts.

Column B is mid-point of the range in Column 8 of Table D.10 in 2000 Rule Appendix D where the 1999 value is labeled preliminary and the 2000 value

is labeled projected.

Column C estimates are from HUD.

Interest rates are from the Federal Reserve Board.

The ratio of mortgage originations to net change should be positively correlated with the proportion of total originations that are refinancings, for which the net change in mortgage debt would be expected to be low relative to that on loans taken out in connection with a property acquisition. (This is the pattern observed in the single-family mortgage market.) Refinancings, in turn, would be expected to be prevalent relative to purchase loans at times when interest rates are low relative to their recent past.

The historical evidence generally supports this expectation regarding the relationship of originations to net lending. As shown in Table D.3, total originations have been highest relative to net change when interest rates have been low relative to their recent past. The ten-year Treasury yield, a common benchmark for pricing multifamily mortgages, has generally trended down since 1990. The early 1990s were all marked by high originations relative to net change, and these were also years in which interest rates were particularly low relative to their trailing five-year averages. In 1996 and 1997, by contrast, originations were less high relative to net change, and these were years in which interest rates were only slightly lower than their five-year trailing averages.

In estimating conventional originations for 1999–2002, the 1998 experience is a useful benchmark. That year, total originations exceeded the net change by about 80 percent, as shown in Table D.3. There was also a big drop in interest rates in 1998 relative to the recent past, providing an incentive for refinancings. As shown in the table, interest rates rose slightly in 1999 and again in 2000, presumably diminishing the incentive to refinance. Nonetheless, the net change in

mortgage debt was higher in 1999 and 2000 than it had been in 1998.

Putting all this together, it seems that the appropriate ratio of total originations to net change to apply to 1999 and 2000 would be below that of 1998 and of most other years of the 1990s. Applying a ratio of 1.5 to the net change estimates in 1999 and 2000 results in a total originations estimate of approximately \$56 billion. Subtracting the \$4 billion in FHA originations results in estimates of \$52 billion for conventional originations in each year. A subjective confidence band around this point estimate is at least +/-\$2 billion.

Turning to the estimate for 2001, the first thing to note is that net change in mortgage debt jumped to \$48 billion from \$37 billion of the previous two years. The second thing to note is that interest rates fell by nearly a percentage point in 2001 relative to their past average. For both of these reasons, total originations in 2001 would be expected to have been higher than in 1999 or 2000. How much higher is a subjective judgment, but 1.5 would seem an appropriate multiple to apply to the net change number in 2001. This is the same multiple as in 1999 and 2000, despite the added refinancing incentive in 2001. By the beginning of 2001, there were relatively few properties "at risk" of refinancing. Many presumably had refinanced in one of the preceding years, and lock-out provisions, yield maintenance agreements, and other loan conditions may have kept these properties from coming in for refinancings. Also, there may have been some short-run capacity problems in the multifamily loan origination industry in 2001 that further curtailed volume.

Applying the 1.5 multiple to 2001's net change of \$48 billion yields a total originations estimate of \$72 billion. Subtracting the \$5 billion of FHA business results in a conventional originations estimate of \$67 billion, to which a subjective confidence band of at least +/-\$2 billion appears warranted.

As seen in Table D.3, the Flow of Funds methodology indicates that total conventional originations decreased 7.5% between 2001 and 2002. In 2002, the net change in mortgage debt decreased slightly to \$44 billion. Using the 1.5 multiple for 2002's net change of \$44.2 billion yields a total originations estimate of \$66 billion. Subtracting \$4.5 billion of FHA business results in a conventional originations estimate of \$62 billion.

This Flow of Funds estimate is over \$5 billion less than the estimate from HUD New. This is surprising given that the HUD New method is supposed to serve as a lower boundary on the size of the multifamily market, while the Flow of Funds method is designed to produce a higher "point" estimate of the actual size of the market.

4. Most Likely Range

In the 2000 Rule, estimates of conventional multifamily loan originations from various sources and methods were evaluated in determining the most likely range of annual originations. Those estimates were summarized in Table D.10 in the 2000 Rule. Some of the estimates from that table are reproduced below, in Table D.4, along with updates and estimates from the Flow of Funds method.

Table D.4

Estimates of Conventional Multifamily Mortgage Market (\$ billions)

	4	6	ę	(F)	9	(4)	. 6		(6)	(40)		(11)	(61)	
	3	SMLA		New Revised	ACLI+	Urban	:	6	FoF	í)			Multifamily	mily
1990	\$30.6	\$25 9	NC.	& Adjusted	1.25*HMDA \$51.4	<u>Institute</u>	Fanne Mae	Freddie Mac	Based	M156 \$37.4 (RFS)	in 20	Likely Range 000 now	Mix (Pct)	Max
1991	\$24.6	\$22.7			\$11.8						\$22-24		16%	17%
1992	\$25.2	\$23.5			\$14.0	\$28.7					\$24-26		11%	12%
1993	\$30.0	\$28.9			\$17.9	\$30.2					\$28-30		13%	14%
1994	\$31.7	\$31.7			\$21.4	\$33.8	\$32.2				\$31-33		20%	21%
1995	\$37.9	\$32.4	\$ 24.8	\$26.1	\$20.4	\$38.5	\$33.7	\$21-27		\$36.7 (POMS)	\$33-35		30%	21%
1996	\$43.7	\$33.3	\$ 34.5	\$34.5	\$23.8	\$40.6		\$24-29			\$33-37		17%	%61
1997	\$44.6	\$35.5	\$ 38.2	\$38.3	\$28.8	\$43.9	\$35-40	\$28-30			\$36-40		%91	18%
1998			\$ 52.9	\$52.9	\$38.3	\$40.6	\$40-45	\$40-50			\$52-55		13%	14%
1999			\$ 44.5	\$48.6	\$42.2	\$48.3	\$37-41		\$52		\$45-48	\$50-54	15%	%91
2000			\$ 42.0	\$42.1	\$34.8	\$50.6			\$52		\$42-44	\$48-52	16%	17%
2001				\$59.0	\$48.4				295			\$65-69	13%	14%
2002				2.73	\$61.3				\$62			\$60-64 and \$67.7	98% 10. and 109%	10.4%

The following entries are from Table D.10 of the 2000 Rule: Columns 1-3.5 (through 1998), 6-8, 10, and "Likely Range in 2000". All of these entries are described and interpreted in the 2000 Rule.
Columns 4,9, and "Likely Range Now" are derived and explained in the text of this Appendix. Sources and Notes:

Both HUD New (column #4 in Table D.4) and FoF-based (column #9) indicate a surge in lending activity in 2001. Some corroboration of this jump is provided by other indicators, flawed though they may be. HMDA has well-documented coverage problems with multifamily loans, but it is noteworthy that HMDA-estimated conventional originations stayed in the same general range (\$26 to \$31 billion) in 1998-2000 before jumping to \$36 billion in 2001. The composite of 1.25 times HMDA originations plus life insurance commitments, described in the 2000 Rule and updated here in column #5, also follows this basic path. Similarly, aggregate GSE multifamily purchases and securitizations stayed in the same general level in 1998-2000, before jumping in 2001, although this trend reflects changes in both market size and GSE market share. FHA originations (not shown) also rose substantially in 2001, but this too may indicate more than just market size trends.

Column #11 of Table D.4 gives the likely ranges of originations for each of the years. These are based on the estimates from all sources and interpretations of their strengths and weaknesses. In 1999, the \$4 billion upward revision to the HUD New estimate from the preliminary figure reported in the 2000 Rule, together with the higher estimate produced by the FoF-based method, justify an upward revision to the \$45-\$48 range estimated in the 2000 Rule. The revised range is set at \$50-54 billion. In 2000, HUD New (revised and extended version) suggests that originations were somewhat lower than in 1999, but FoF-based has originations holding at \$52 billion. Balancing these conflicting indicators, a range of \$48-\$52 billion is

selected for 2000. Finally, all indicators point to a substantial pickup in 2001, and the range that seems to fit best with those indicators is \$65–\$69 billion.

In 2002, the various methods of estimation give a mixed picture. HUD New indicates a surge in lending activity in 2002, while the flow of funds method shows a decrease in lending activity. Other methods also show divergent trends. The composite of 1.25 times HMDA originations plus life insurance commitments also shows a significant increase between 2001 and 2002. On the other hand, aggregate GSE multifamily purchases and securitizations showed a slight decrease between 2001 and 2002. FHA originations (not shown) also decreased slightly in 2002.

While this is a subjective judgment, 1.5 may not be the appropriate multiple to apply to net mortgage debt outstanding in the flow of funds model in 2002. The difference between the flow of funds estimate and the HUD estimate cannot be reconciled without adjusting the FOF multiple. Given the low interest rates in 2002, and a refinancing boom in the single-family mortgage market, it could be that the multifamily market also had a significant amount of refinancing activity. In such a case, there could be an increase in the size of the multifamily market without a corresponding increase in net mortgage debt outstanding. A higher multiple would need to be applied to the Flow of Funds model to compensate for the increase in multifamily refinancings.

Due to data limitations, the above remains a speculation. The largest increase in multifamily volume came from HMDA reporting lenders. The HMDA data do not allow for the separation of multifamily purchase originations from refinancings. Other data sources need to be explored to determine if an adjustment to the FoF-based model is appropriate.

5. Loan Amount per Unit

In determining the size of the conventional multifamily mortgage market for purposes of the GSE rules, the measure of market size is the annual number of conventionally financed multifamily rental housing units. The number of units is derived by dividing the aggregate annual originations by an estimate of the average loan amount per housing unit financed. For this reason, accuracy in the estimate of loan amount per unit is as important as accuracy in the dollar estimate of aggregate conventional originations. A 10 percent error in either will result in a 10 percent error in the estimate of market size.

The 2000 Rule used estimates of loan amount per unit drawn from various sources. As summarized in Table D.9 of the 2000 Rule and the accompanying text, the estimates for 1993-1998 were taken from the GSEs and for 1999 from CMBS data. "Unpaid Principal Balance" or UPB—a balance sheet measure which for current year loan originations will differ little from the initial loan amount—is used to calculate aggregate originations of loans bought or securitized by the GSEs or pooled into non-GSE mortgage-backed securities. The figures from Table D.9 of the 2000 Rule are reproduced below in Table D.5, along with updated estimates from all three sources for 2000, 2001 and 2002. The estimates that are new since the 2000 Rule appear in italics.

Table D.5

Multifamily Loan Amount per Unit, 1990-2002

	Fa	annie Mae				Fred	reddie Mac									
UPB per		UPB	Fannie Mae F	Б	Fannie Mae		UPB F	reddie Mac	Fre	ddie Mac	CM	3S UPB	CMBS	CMBS		Adjusted
unit (\$)*	প্র	millions)	units	IJ	JPB/unit (\$)	(\$ n	\$ millions)	units UPB/unit (\$)	UP	UPB/unit (\$)	(\$ n	(\$ millions)	units	UPB/unit (\$)		UPB/unit (\$)
69																
₩,																
1992 \$ 25,888																
69	69	4,602	186,471	69	24,682	69	161	10,794	69	17,710						
₩	6/)	4,735	221,420	₩	21,383	69	913	45,538	69	20,052						
↔	ઝ	5,958	235,358	69	25,316	69	1,582	68,381	69	23,138						
₩	\$^	7,037	272,931	↔	25,782	69	2,350	98,574	69	23,843						
69 >	₩	968'9	253,065	₩	27,251	69	2,716	99,469	69	27,304						
69 3	↔	12,503	393,397	69	31,782	∽	6,578	221,319	69	29,723	69	12,465	406,006	\$ 30,702		
↔	↔	9,393	294,091	69	31,938	69	7,621	191,492	∽	39,798	69	9,238	300,724	\$ 30,719		
6 €	69	10,078	289,509	69	34,811	69	6,781	163,580	69.	41,454	69	6,223	184,397	\$ 33,748		
64 3	59	18,688	503,909	59	37,086	69	11,837	315,370	69	37,534	69.	7,647	234,948	\$ 32,548	\$9	34,000
(/)	69,	18,278	461,397	60	39,614	69	13,330	333,038	69	40,025	69	5,662 **	152,863 **	69.	69	35,000

Figures in italics for 2000, 2001 and 2002 are new; all other figures are from Table D.9 of the 2000 Rule. * 1990-1992: Average single-family conventional conforming loan amount/3.57. See 2000 Rule for details. 1993-1998: Weighted average of Fannie Mae and Freddie Mac.

1999: CMBS data. 2000-2001: See text.

** Data for CMBS only covers the first 10 months of 2002.

Several options are available for developing estimates for 2000, 2001 and 2002. The first is to use the UPB (unpaid principal balance) per unit estimates from the GSEs. These estimates, taken from the Fannie Mae and Freddie Mac annual activity reports to HUD, are as follows, computed as in the 2000 Rule as a unit-weighted average of the unpaid principal balance (UPB) per multifamily unit in Fannie Mae's and Freddie Mac's portfolios:

1997	\$27,266
1998	31,041
1999	35,038
2000	37,208
2001	37,258
2002	39,787

The figure for 2002 is approximately 46 percent higher than in 1997. Both Fannie Mae and Freddie Mac's portfolios generate estimates of between \$39,000 and \$40,000 for 2002

Several alternative approaches to estimating loan amount per unit are available. The first is to base the estimate on CMBS data, as was done for 1999 in the 2000 Rulemaking. As shown in the last column of Table D.5, the estimates of UPB/unit from this source are somewhat below those of the GSEs and indicate less increase since the late 1990s.

In the first 10 months of 2002, CMBS properties showed a UPB/unit of \$37,038, a nearly 14 percent jump over the previous year. Although slightly below the UPB/unit for the GSEs, the CMBS numbers are closer to the GSE calculations than in previous years.

Another approach is to move the 1999 estimate of UPB/unit forward by some justifiable index. The 2001 estimates use the change in average rent on multifamily rental units from the American Housing Survey. Because AHS data are not available for 2002, the 2002 estimate uses the consumer price index for rent of primary residence. Both AHS and CPI rent estimates are listed below:

Year	Median	Mean	CPI
1999 2001 2002	\$550 590 N/A	\$592 647 N/A	177.5 192.1 199.7

There is some variation between the two measures. In the AHS, median rent rose 7.3 percent over this two-year period, and mean rent increased 9.3 percent. Meanwhile, the CPI showed an increase of 8.2 percent. In 2001, using the AHS produces an estimate of \$34,000. The CPI yields a smaller estimate for 2001; applying the 8.2 percent increase from the CPI results in a 2001 estimate of \$33,200. Since the AHS data are unavailable in 2002, the CPI provides a 2002 estimate of approximately \$35,000.

In 2001, the rent-adjusted 1999 estimate was in between the estimates from the CMBS and GSE data, and was a fair estimate of the actual size of the market. In 2002, however, the rent-adjusted number is below both the CMBS and GSE calculations. The rent-adjusted number could be underestimating the 2002 UPB/unit. Either the CMBS or GSE calculations, or an average of the various

methods could be used. Section F will report the results of several sensitivity analyses showing the effects of the different multifamily mortgage estimates (HUD New versus Flow-of-Funds) and different per unit amounts (\$35,000 or \$37,275 which is an average of the various estimates) on the goalsqualifying shares for the year 2002. Under the various estimates, the multifamily mix (defined below) for 2002 ends up around 11 percent.

6. Multifamily Mix During the 1990s

The section uses the information on dollar volume of multifamily originations (Table D.4) and average loan amounts (Table D.5) to estimate the number of multifamily units financed each year as a percentage share of the total (both single-family and multifamily) number of dwelling units financed each year; the years covered include 1991 to 2001. This percentage share, called the "multifamily mix", is reported in the last two columns of Table D.4.13 The "minimum" ("maximum") multifamily mix figure reflects the low (upper) end of the "likely range" of multifamily dollar originations, also reported in Table D.4. Because of the high goalsqualifying shares of multifamily housing, the multifamily mix is an important parameter in HUD's projection model for the overall market; other things equal, a higher multifamily mix (or conversely, a lower share of single-family loans) leads to a higher estimate of goals-qualifying loans in the

overall mortgage market.
Based on the "likely range" of annual conventional multifamily origination volume, multifamily units have represented 15.1 percent (the average of the "minimum" figures) to 16.3 percent (the average of the "maximum" figures) of units financed each year between 1991 and 2002. Considering the mid-points of the "likely range", the multifamily mix averaged 15.7 percent during this period. Notice that multifamily mix is lower during years of heavy refinancing when single-family originations dominate the mortgage market; the multifamily mix was only 13-14 percent during 1993, 1998, and 2001, and approximately 11 percent during 2002.14 As discussed in Sections F-H, the record singlefamily originations (\$3.3 trillion) during 2003 likely resulted in a lower multifamily mix

than any of the years between 1991 and 2002. Sensitivity analyses are conducted to show the effects of multifamily mixes less than the previous lows of 11 percent in 1992 and 2002.

The multifamily share of the conforming conventional market (or "multifamily mix") is utilized below as part of HUD's analysis of the share of units financed each year meeting each of the housing goals. Following the 2000 Rule, the analysis will focus on multifamily mixes of 15 percent and 16.5 percent, which seems reasonable given the 1991–2002 estimates reported in Table D.4. While at the low end of the 1992-2002 averages for the "likely range", a 15 percent mix more readily accommodates any uncertainty about the data and the estimation process. An alternative multifamily mix assumption of 13.5 percent is also considered, as well as even lower ones in order to fully consider the effects of heavy refinancing environments such as 2001-03.

D. Single-Family Owner and Rental Mortgage Market Shares

1. Available Data

As explained later, HUD's market model will also use projections of mortgage originations on single-family (1-4 unit) properties. Current mortgage origination data combine mortgage originations for the three different types of single-family properties: owner-occupied, one-unit properties (SF-O); 2-4 unit rental properties (SF 2-4); and 1-4 unit rental properties owned by investors (SF-Investor). The fact that the goal percentages are much higher for the two rental categories argues strongly for disaggregating single-family mortgage originations by property type. This section discusses available data for estimating the relative size of the single-family rental mortgage market.

The Residential Finance Survey (RFS) and HMDA are the data sources for estimating the relative size of the single-family rental market. The RFS, provides mortgage origination estimates for each of the three single-family property types but it is quite dated, as it includes mortgages originated between 1987 and 1991. (An updated version of the RFS based on the 2000 Census will not be available until the spring of 2004). HMDA divides newly-originated single-family mortgages into two property types: 15

(1) Owner-occupied originations, which include both SF–O and SF 2–4.

(2) Non-owner-occupied mortgage originations, which include SF Investor. The percentage distributions of mortgages from these data sources are provided in Table D.6a. (Table D.6b will be discussed below.) Because HMDA combines the first two categories (SF–O and SF 2–4), the comparisons between the data bases must necessarily focus on the SF investor category. According to 2000 (2001) HMDA data, investors account for 9.4 (9.9 percent) percent of home purchase loans and 7.6 percent (5.9 percent) of refinance loans. 16

¹³ 1990 is excluded from this calculation because of the unusually high multifamily mix that year. Also, the estimated multifamily mix from the HUD New Method is also provided for 2002 since it was greater than the estimate from the Flow of Funds method.

¹⁴The projection model for 2002 showed the following multifamily mixes for 2002: 11.5 percent for the HUD New multifamily estimate (\$67.7 billion) if the average loan amount is \$35,000 and 10.9 percent if the average loan amount is \$37,275; 11.0 percent for the top end (\$64 billion) of the Flow of Funds multifamily range (\$60-64 billion) if the average loan amount is \$35,000 and 10.4 percent if the average loan amount is \$37,275; 10.7 percent for the mid-point (\$62 billion) of the Flow of Funds multifamily range if the average loan amount is \$35,000 and 10.1 percent if the average loan amount is \$37,275; and 10.4 percent for the low end (\$60 billion) of the Flow of Funds multifamily range if the average loan amount is \$35,000 and 9.8 percent if the average loan amount is \$37.275.

 $^{^{15}}$ The data in Table D.6a ignore HMDA loans with "non-applicable" for owner type.

¹⁶ Due to the higher share of refinance mortgages during 2001, the overall single-family-owner

Assuming a 35 percent refinance rate per HUD's projection model, the 2000 (2001) HMDA data are consistent with an investor share of 8.8 (8.5) percent.¹⁷ The RFS estimate

percentage reported by HMDA for 2001 (92.7 percent) is larger than that reported for 2000 (91.3 percent).

¹⁷ HMDA data for 2002 would yield a slightly higher investor share; the derived investor share

of 17.3 percent is approximately twice the HMDA estimates. In their past comments, the GSEs have argued that the HMDA-reported SF investor share should be used by HUD. In its 1995 and 2000 rules, HUD's baseline model assumed a 10 percent share for the SF investor group—only slightly higher than the HMDA-based estimates; alternative models

assuming a 35 percent refinance rate would be 9.6 percent if $2002\ HMDA$ data were used.

assuming 8 percent and 12 percent were also considered. As discussed below, HUD's baseline projection of 10 percent is probably quite conservative; however, given the uncertainty around the data, it is difficult to draw firm conclusions about the size of the single-family investor market, which necessitates the sensitivity analysis that HUD conducts. The release this spring of the updated RFS should clarify this issue.

Table D.6a

Percentage Distribution of Single-Family-Owner and Rental Mortgages

	2000	(2001) HMI	A (Perc	ent)	Pro	jected		
	Pur	chase	Ref	inance	•	me 35% nce Rate)	1987-91 ¹ RFS	HUD's 1995 and 2000 Rules
SF-O	90.6	(90.1)	92.4	(94.1)	91.2	(91.5)	80.4	88.0
SF 2-4	,	luded ove)					2.3	2.0
SF Investor	9.4	(9.9)	7.6	(5.9)	8.8	(8.5)	17.3	10.0
Total	100.0	(100.0)	100.0	(100.0)	100.0	(100.0)	100.0	100.0

Note: All data are for metropolitan areas. The refinance rate of 35 percent is assumed in HUD's baseline model described in Section E.

Table D.6b

Percentage Distribution of Newly-Mortgaged Single-Family-Owner and Rental Units

	With 35%	1) HMDA 6 Refinance mption	1997-91 RFS	HUD's 1995 and 2000 Rules	Blackley/Follain Alternative
SF-O	84.5	(84.8)	73.8	83.0	80.6
SF-2-4 Owner ¹	1.9	(1.9)	2.1	1.9	1.9
SF-2-4 Renter	2.4	(2.4)	2.7	2.4	2.3
SF Investor	11.2	(10.9)	21.4	12.7	15.2
Total	100.0	(100.0)	100.0	100.0	100.0
SF-Rental	13.6	(13.3)	24.1	15.1	17.5

All data are for metropolitan areas. Notice that the SF 2-4 category has been divided into its owner and renter subcomponents. This is easily done based on the assumption of 2.25 units per SF 2-4 mortgage. For each mortgage, one unit represents the owner occupant and 1.25 additional units represent renter occupants. The owner-occupant of the 2-4 property is included in the SF-O category in this appendix. This is necessary because different data sources are used to estimate the owner's income and the affordability of the rental units. The income of owners of 2-4 properties are included in the borrower income data reported by HMDA. The AHS and POMS will be used to estimate the affordability of the rental units.

BILLING CODE 4210-27-C

2. Analysis of Investor Market Share

Blackley and Follain. During the 1995 rulemaking, HUD asked the Urban Institute to analyze the differences between the RFS and HMDA investor shares and determine which was the more reasonable. The Urban Institute's analysis of this issue is contained in reports by Dixie Blackley and James Follain. 18 Blackley and Follain provide reasons why HMDA should be adjusted upward as well as reasons why the RFS should be adjusted downward. They find that HMDA may understate the investor share of single-family mortgages because of "hidden investors" who falsely claim that a property is owner-occupied in order to more easily obtain mortgage financing. RFS may overstate the investor share of the market because units that are temporarily rented while the owner seeks another buyer may be counted as rental units in the RFS, even though rental status of such units may only be temporary. The RFS's investor share should be adjusted downward in part because the RFS assigns all vacant properties to the rental group, but some of these are likely intended for the owner market, especially among one-unit properties. Blackley and Follain's analysis of this issue suggests lowering the investor share from 17.3 percent to about 14-15 percent.

Finally, Blackley and Follain note that a conservative estimate of the SF investor share is advisable because of the difficulty of measuring the magnitudes of the various effects that they analyzed. In their 1996 paper, they conclude that 12 percent is a reasonable estimate of the investor share of single-family mortgage originations. ¹⁹ Blackley and Follain caution that uncertainty exists around this estimate because of inadequate data.

3. Single-Family Market in Terms of Unit Shares

The market share estimates for the housing goals need to be expressed as percentages of units rather than as percentages of mortgages. Thus, it is necessary to compare unit-based distributions of the single-family mortgage market under the alternative estimates discussed so far. The mortgage-based distributions given in Table D.6a were adjusted in two ways. First, the owneroccupied HMDA data were disaggregated between SF-O and SF 2-4 mortgages by assuming that SF 2-4 mortgages account for 2.0 percent of all single-family mortgages; according to RFS data, SF 2-4 mortgages represent 2.3 percent of all single-family mortgages so the 2.0 percent assumption may be slightly conservative. Second, the resulting mortgage-based distributions were shifted to unit-based distributions by

applying the following unit-per-mortgage assumptions: 2.25 units per SF 2–4 property and 1.35 units per SF investor property. Both figures were derived from the 1991 RFS.²⁰

Based on these calculations, the percentage distribution of newly-mortgaged single-family dwelling *units* was derived for each of the various estimates of the investor share of single-family mortgages (discussed earlier and reported in Table D.6a). The results are presented in Table D.6b. Three points should be made about these data. *First*, notice that the "SF-Rental" row highlights the share of the single-family mortgage market accounted for by all rental units.

Second, notice that the rental categories represent a larger share of the unit-based market than they did of the mortgage-based market reported earlier. This, of course, follows directly from applying the loan-perunit expansion factors.

Third, notice that the rental share under HMDA's unit-based distribution is again about one-half of the rental share under the RFS's distribution. The rental share in HUD's 1995 and 2000 Rules and this year's proposed rule is slightly larger than that reported by HMDA. The rental share in the "Blackley-Follain" alternative is slightly above HUD's estimate. Rental units account for 15.1 percent of all newly financed single-family units under HUD's baseline model, compared with 13.7 (13.1) percent under a model based on 2000 (2001) HMDA data.

4. Conclusions

This section has reviewed data and analyses related to determining the rental share of the single-family mortgage market. There are two main conclusions:

- While there is uncertainty concerning the relative size of this market, the projections made by HUD in 1995 and 2000 appear reasonable and, therefore, will serve as the baseline assumption in the HUD's market share model for this year's Proposed Rule.
- HMDA likely underestimates the single-family rental mortgage market. Thus, this part of the HMDA data are not considered reliable enough to use in computing the market shares for the housing goals. Various sensitivity analyses of the market shares for single-family rental properties are conducted in Sections F, G, and H. These sensitivity analyses will include the GSEs' recommended model that assumes investors account for 8 percent of all single-family mortgages. These sensitivity analyses will show the effects on the overall market estimates of the different projections about the size of the single-family rental market.

The upcoming RFS based on the year 2000 Census will help clarify issues related to the investor share of the single-family mortgage market. At that time, HUD will reconsider its estimates of the investor share of the mortgage market.

E. HUD's Market Share Model

This section integrates findings from the previous two sections about the size of the multifamily mortgage market and the relative distribution of single-family owner and rental mortgages into a single model of the mortgage market. The section provides the basic equations for HUD's market share model and identifies the remaining parameters that must be estimated.

The output of this section is a unit-based distribution for the four property types discussed in Section B.²¹ Sections F–H will apply goal percentages to this property distribution in order to determine the size of the mortgage market for each of the three housing goals.

1. Basic Equations for Determining Units Financed in the Mortgage Market

The model first estimates the number of dwelling units financed by conventional conforming mortgage originations for each of the four property types. It then determines each property type's share of the total number of dwelling units financed.

a. Single-Family Units

This section estimates the number of single-family units that will be financed in the conventional conforming market, where single-family units (SF–UNITS) are defined as:

$$SF-UNITS = SF-O + SF 2-4 + SF-INVESTOR$$

First, the dollar volume of conventional conforming single-family mortgages (CCSFMS) is derived as follows:

- (1) CCSFM\$ = CONV% * CONF% * SFORIG\$ Where:
- $CONV\% = conventional \ mortgage$ originations as a percent of total mortgage originations; estimated to be $88\%.^{22}$
- CONF% = conforming mortgage originations (measured in dollars) as a percent of conventional single-family originations; forecasted to be 80% by industry.
- SFORIG\$ = dollar volume of single-family one-to-four unit mortgages; \$1,700 billion is used here as a starting assumption to reflect market conditions during the years 2005–2008.²³ While

¹⁸ Dixie M. Blackley and James R. Follain, "A Critique of the Methodology Used to Determine Affordable Housing Goals for the Government Sponsored Housing Enterprises," report prepared for Office of Policy Development and Research, Department of Housing and Urban Development, October 1995; and "HUD's Market Share Methodology and its Housing Goals for the Government Sponsored Enterprises," unpublished paper, March 1996.

¹⁹Blackley and Follain (1996), p. 20.

²⁰ The unit-per-mortgage data from the 1991 RFS match closely the GSE purchase data for 2001. Blackley and Follain show that an adjustment for vacant investor properties would raise the average units per mortgage to 1.4; however, this increase is so small that it has little effect on the overall market estimates.

²¹ The property distribution reported in Table D.1 is an example of the output of the market share model. Thus, this section completes Step 1 of the three-step procedure outlined above in Section B.

²² According to estimates by the Mortgage Bankers Association of America (MBAA), the conventional share of the 1–4 family market was between 86 and 88 percent of the market from 1993 to 1999, with a one-time low of 81 percent in 1994. Calculated from "1–4 Family Mortgage Originations" tables (Table 1—Industry and Table 2—Conventional Loans) from "MBAA Mortgage and Market Data," at www.MBAAa.org/marketkdata/ as of July 13, 2000. More recent unpublished estimates by MBAA are slightly higher.

²³ Single-family mortgage originations of \$1,700 billion are similar to Freddie Mac's projection of \$1,748 billion for 2005 and Fannie Mae's projection of \$1,675 billion for 2005. As discussed later, single-family originations could differ from \$1,700 billion during the 2005–2008 period that the goals will be in effect. As recent experience shows,

alternative assumptions will be examined, it must be emphasized that the important concept for deriving the goal-qualifying market shares is the relative importance of single-family versus multifamily mortgage originations (the ''multifamily mix'' discussed in Section C) rather than the total dollar volume of single-family originations considered in isolation.

Substituting these values into (1) yields an estimate for the conventional conforming market (CCSFM\$) of \$1,197 billion.

Second, the number of conventional conforming single-family mortgages (CCSFM#) is derived as follows:

(2) CCSFM# = (CCSFM\$ * (1-REFI)/ PSFLOAN\$) + (CCSFM\$ * REFI)/ RSFLOAN\$)

Where:

REFI = the refinance rate, assumed to be 35 percent for the baseline.²⁴

PSFLOANS = the average conventional conforming purchase mortgage amount for single-family properties; estimated to be \$146,000.²⁵

RSFLOANS = the average conventional conforming refinance mortgage amount for single-family properties; estimated to be \$131,000.²⁶

market projections often change. For example, the MBAA projected \$1,246 billion for 2003, while their projection for 2003 rose to \$1,774 billion in January 2003; of course, actual 2003 mortgage originations were almost double the latter amount. (See https://www.MBAAa.org/marketdata/forecasts for January 2003 Mortgage Finance Forecasts.) In its January 22, 2004 forecast, the MBAA projected mortgage originations of \$1.9 trillion in 2004 and approximately \$1.7 trillion in 2005 and 2006. Section F will report the effects on the market estimates of alternative estimates of single-family mortgage originations.

²⁴ The model requires an estimated refinance rate because purchase and refinance loans can have different shares of goals-qualifying units. In 2003, the refinance rate was over 60 percent. In its January 22, 2004 forecast, the MBAA projects 34 percent for 2004 and 22 percent for 2005. Freddie Mac projects a 36 percent refinance rate for 2004 and a 29 percent rate for 2005, and Fannie Mae projects a 48 percent refinance rate for 2004 and 24 percent for 2005. The baseline model uses a higher refinance rate of 35 percent because conforming conventional loans tend to refinance at a higher rate than the overall market. Sensitivity analyses for alternative refinance rates are presented in Sections F–H.

²⁵ The average 2002 purchase loan amount is estimated at \$135,060 for owner occupied units using 2002 HMDA average loan amounts for single-family home purchase loans in metropolitan areas. A small adjustment is made to this figure to account for a small number of two-to-four and investor properties (see Section D above). This produces an average purchase loan size of \$133,458 for 2002 which is then inflated 3 percent a year for three years and then rounded to arrive at an estimated \$146,000 average loan size for home purchase loans in 2005.

²⁶ The average refinance loan amount is estimated by averaging the relationship between HMDA average purchase and refinance loan amounts for 1999 and 2000, which were non-refinance environments. Applying this average of 90 percent (refinance loan amount/purchase loan amount) to the \$146,000 average loan amount for purchase loans gives a rounded estimate of \$131,000 for average refinance loan amounts. When refinance

Substituting these values into (2) yields an estimate of 8.5 million mortgages.

Third, the total number of single-family mortgages is divided among the three single-family property types. Using the 88/2/10 percentage distribution for single-family mortgages (see Section D), the following results are obtained:

- (3a) SF-OM# = 0.88 * CCSFM# = number of owner-occupied, one-unit mortgages = 7.5 million.
- (3b) SF-2-4M# = 0.02 * CCSFM# = number of owner-occupied, two-to-four unit mortgages = 0.17 million.
- (3c) SF-INVM# = 0.10 * CCSFM# = number of one-to-four unit investor mortgages = 0.85 million.

Fourth, the number of dwelling units financed for the three single-family property types is derived as follows:

- (4a) SF-O = SF-OM# + SF-2-4M# = number of owner-occupied dwelling units financed = 7.7 million.
- (4b) SF 2-4 = 1.25 * SF-2-4M# = number of rental units in 2-4 properties where a owner occupies one of the units = 0.2 million.²⁷
- (4c) SF-INVESTOR = 1.35 * SF-INVM# = number of single-family investor dwelling units financed = 1.1 million.

Fifth, summing equations 4a–4c gives the projected number of newly-mortgaged single-family units (SF–UNITS):

(5) SF-UNITS = SF-O + SF 2-4 + SF-INVESTOR = 9.0 million

b. Multifamily Units

The number of multifamily dwelling units (MF–UNITS) financed by conventional conforming multifamily originations is calculated by the following series of equations:

(5a) TOTAL = SF-UNITS + MF-UNITS (5b) MF-UNITS = MF-MIX * TOTAL = MF-MIX * (SF-UNITS + MF-UNITS) = [MF-MIX/(1-MF-MIX)] * SF-UNITS Where:

MF–MIX = the "multifamily mix", or the percentage of all newly-mortgaged dwelling units that are multifamily; as discussed in Section C, alternative estimates of the multifamily market will be included in the analysis. As explained in Section C above, the baseline model assumes a multifamily mix of 15 percent; results are also presented in the basic market tables of Sections F-H for a higher (16.5 percent) and a lower (13.5 percent) multifamily mix. In addition, further sensitivity analyses are reported in those sections for even lower multifamily mixes that could occur during periods of heavy single-family refinancing activity.

environments are used, \$146,000 average loan amounts are used for both purchase and refinance loans. This relationship is consistent with the observed relationship in past refinance years such as 1998, 2001, and 2002.

 27 Based on the RFS, there is an average of 2.25 housing units per mortgage for 2–4 properties. 1.25 is used here because one (*i.e.*, the owner occupant) of the 2.25 units is allocated to the SF–O category. The RFS is also the source of the 1.35 used in (4c).

Assuming a multifamily mix of 15 percent and solving (5b) yields the following:

(5c) MF-UNITS = [0.15/0.85] * SF-UNITS = 0.176 * SF-UNITS = 1.6 million.

c. Total Units Financed

The total number of dwelling units financed by the conventional conforming mortgage market (TOTAL) can be expressed in three useful ways:

- (6a) TOTAL = SF-UNITS + MF-UNITS = 10.6 million (or more precisely, 10,632,145 units)
- (6b) TOTAL = SF-O + SF 2-4 + SF-INVESTOR + MF-UNITS
- (6c) TOTAL = SF-O + SF-RENTAL + MF-UNITS

Where:

SF-RENTAL equals SF-2-4 plus SF-INVESTOR

2. Dwelling Unit Distributions by Property Type

The next step is to express the number of dwelling units financed for each property type as a percentage of the total number of units financed by conventional conforming mortgage originations.²⁸

The projections used above in equations (1)–(6) produce the following distributions of financed units by property type:

	% Share
SF-O	72.2 2.0 10.8 15.0
Totalor	100.0
SF-O	72.2 12.8 15.0
Total	100.0

Sections C and D discussed alternative projections for the mix of multifamily originations and the investor share of singlefamily mortgages. Following the 2000 Rule, this appendix will focus on three multifamily mixes (13.5 percent, 15.0 percent, and 16.5 percent) but there will also be sensitivity analysis of other multifamily mix assumptions. Under a 16.5 percent multifamily mix, the newly-mortgaged unit distribution would be 70.9 percent for Single-Family Owner, 12.6 percent for Single-Family Renter, and 16.5 percent for Multifamily-Units. The analysis in sections F-H will focus on goals-qualifying market shares for this property distribution as well as the one presented above for the more conservative multifamily mix of 15 percent.

The appendix will assume the following for the investor share of single-family mortgages—8 percent, 10 percent, and 12 percent. The middle value (10 percent investor share) is used in the above calculations and will be considered the

²⁸The share of the mortgage market accounted for by owner occupants is (SF–O)/TOTAL; the share of the market accounted for by all single-family rental units is SF–RENTAL/TOTAL; and so on.

"baseline" projection throughout the appendix. However, HUD recognizes the uncertainty of projecting origination volume in markets such as single-family investor properties; therefore, the analysis in Sections F–H will also consider market assumptions other than the baseline assumptions.

Table D.7 reports the unit-based distributions produced by HUD's market share model for different combinations of these projections. The effects of the different projections can best be seen by examining the owner category which varies by 6.6 percentage points, from a low of 68.9 percent (multifamily mix of 16.5 percent coupled

with an investor mortgage share of 12 percent) to a high of 75.5 percent (multifamily mix of 13.5 percent coupled with an investor mortgage share of 8 percent). The owner share under the baseline projection (15 percent mix and 10 percent investor) is 72.2 percent.

Table D.7

Distribution of Financed Dwelling Units by Property Type for Different Projections of Multifamily and Single-Family Investor Originations

	Mulitf	Mulitfamily Mix (Percent)	ıt)
Investor Share Percentage of Single-Family Mortgage Market	13.5%	15%	16.5%
12 Percent Single-Family Owner-Occupied	71.4 %	70.1 %	% 6.89
Single-Family Rental	15.1	14.9	14.6
Multifamily	13.5	15.0	16.5
Total	100.0	100.0	100.0
10 Percent			
Single-Family Owner-Occupied	73.5 %	72.2 %	70.9 %
Single-Family Rental	13.0	12.8	12.6
Multifamily	13.5	<u>15.0</u>	16.5
Total	100.0	100.0	100.0
8 Percent			
Single-Family Owner-Occupied	75.5 %	74.3 %	73.0 %
Single-Family Rental	11.0	10.7	10.5
Multifamily	13.5	<u>15.0</u>	16.5
Total	100.0	100.0	100.0

Comparison with the RFS. The Residential Finance Survey is the only mortgage data source that provides unit-based property distributions directly comparable to those reported in Table D.7. Based on RFS data for 1987 to 1991, HUD estimated that, of total dwelling units in properties financed by recently acquired conventional conforming mortgages, 56.5 percent were owneroccupied units, 17.9 percent were singlefamily rental units, and 25.6 percent were multifamily rental units. Thus, the RFS presents a much lower owner share than does HUD's model. This difference is due mainly to the relatively high level of multifamily originations (relative to single-family originations) during the mid- to late-1980s, which is the period covered by the RFS. As noted earlier, the RFS based on the year 2000 Census should clarify issues related to the rental segment of the mortgage market when it becomes available in the spring of this year (2004).

F. Size of the Conventional Conforming Mortgage Market Serving Low- and Moderate-Income Families

This section estimates the size of the lowand moderate-income market by applying low- and moderate-income percentages to the property shares given in Table D.7. This section essentially accomplishes Steps 2 and 3 of the three-step procedure discussed in Section B.2.

Technical issues and data adjustments related to the low- and moderate-income percentages for owners and renters are discussed in the first two subsections. Then, estimates of the size of the low- and moderate-income market are presented along with several sensitivity analyses. Based on these analyses, HUD concludes that 51–57 percent is a reasonable estimate of the mortgage market's low- and moderate-income share for the four years (2005–2008) when the new goals will be in effect.

1. Low- and Moderate-Income Percentage for Single-Family-Owner Mortgages

a. HMDA Data

The most important determinant of the low- and moderate-income share of the mortgage market is the income distribution of single-family borrowers. HMDA reports annual income data for families who live in metropolitan areas and purchase a home or

refinance their existing mortgage. ²⁹ The data cover conventional mortgages below the conforming loan limit, which was \$300,700 in 2002. Table D.8 gives the percentage of mortgages originated for low- and moderate-income families for the years 1992–2002. Data are presented for home purchase, refinance, and all single-family-owner loans. The discussion below will often focus on home purchase loans because they typically account for the majority of all single-family-owner mortgages. ³⁰ For each year, a low- and moderate-income percentage is also reported for the conforming market without B&C loans

²⁹ HMDA data are expressed in terms of number of loans rather than number of units. In addition, HMDA data do not distinguish between owner-occupied one-unit properties and owner-occupied 2–4 properties. This is not a particular problem for this section's analysis of owner incomes.

³⁰ Sensitivity analyses will focus on how the results change during a heavy refinancing environment.

Table D.8

Single-Family-Owner Mortgage Market in Metropolitan Areas by Borrower Income: 1992-2002 HMDA Data

	Home Purchase	ırchase	Refinance	ince	Total	Į.
	Conforming Market	Market W/O B&C loans	Conforming Market	Market W/O B&C Ioans	Conforming Market	Market W/O B&C loans
Very-Low-Income Share	6	; ;			1	
1992	8.7%	% /.8	% C.4 % O.3	4.4 %	% % %	5.8% 8.0° 8.0°
2521	10.0	10.0	0.0	7.0.		7.7
1994	6.11	6.11	0.11	10.6	5.11	11.3
1995	12.0	12.0	12.3	11.7	12.1	6.11
9661	12.7	12.7	13.0	12.2	12.8	12.5
1997	13.0	13.0	14.5	13.4	13.7	13.2
1998	13.3	13.2	11.3	10.4	12.1	11.4
1999	15.0	14.7	16.2	14.8	15.6	14.8
2000	14.7	14.4	19.0	17.6	16.3	15.6
2001	13.6	13.5	12.3	11.7	12.7	12.3
2002	14.1	14.0	12.5	12.0	12.9	12.6
Low- and-Moderate-Income Share						
1992	34.4 %	34.4 %	25.2 %	25.2 %	28.2 %	28.1 %
1993	38.9	38.9	29.3	29.3	32.2	32.1
1994	41.8	41.8	39.9	39.3	41.0	40.7
1995	41.4	41.4	41.1	40.1	41.3	40.9
1996	42.2	42.2	42.7	41.6	42.4	41.9
1997	42.5	42.5	45.0	43.4	43.7	42.9
8661	43.0	42.8	39.7	38.3	40.9	39.9
1999	45.2	44.8	47.2	45.3	46.3	45.1
2000	44.8	44.4	51.6	49.6	47.4	46.3
2001	43.2	42.9	41.8	40.9	42.3	41.6
2002	45.3	45.2	42.3	41.5	43.2	42.6

Source: HMDA data for metropolitan areas. See text for methods of excluding B&C loans from the market. Very-low-income includes borrowers with an income less than or equal to 60 percent of the area median income (AMI). Low- and moderate-income includes less than or equal to AMI. Table D.8 also reports similar data for verylow-income families (that is, families with incomes less than 60 percent of area median income). As discussed in Section H, verylow-income families are the main component of the special affordable mortgage market.

Two trends in the income data should be mentioned—one related to the growth in the market's funding of low- and moderate-income families during the 1990s (and particularly the growth since 1998 which was the last year analyzed in HUD's 2000 GSE Rule); and the other related to changes in the borrower income distributions for refinance and home purchase mortgages. Throughout this appendix, "low- and moderate-income" will often be referred to as "low-mod".

Recent Trends in the Market Share for Lower Income Borrowers, First, focus on the percentages in Table D.8 for the total (both home purchase and refinance) conforming market. After averaging about 30 percent during 1992-93, the percentage of borrowers with less than area median income jumped to 41.0 percent in 1994, and remained above 40 percent through 2002. Over the eight year period, 1994 to 2001, the low-mod share of the total market averaged 43.2 percent (or 42.4 percent if B&C loans are excluded from the market totals).31 The share of the market accounted for by very-low-income borrowers followed a similar trend, increasing from 6-7 percent in 1992-93 to about 12 percent in 1994 and averaging 13.3 percent during the 1994-to-2002 period (or 12.8 percent if B&C loans are excluded).

Next, consider the percentages for home purchase loans. The share of the home loan market accounted for by less-than-medianincome borrowers increased from 34.4 percent in 1992 to 45.3 percent in 2002. Within the 1994-to-2002 period, the low-mod share of the home purchase market averaged 44.6 percent between 1999 and 2002, compared with 42.2 percent between 1994 and 1998. Similarly, the very-low-income share of the home purchase market was also higher during the 1999-to-2002 period than during the 1994-to-1998 period (14.4 percent versus 12.6 percent). Note that within the more recent period, the low-mod share for home purchase loans was particularly high during 1999 (45.2 percent) and 2000 (44.8 percent) before falling slightly in 2001 (43.2 percent), only to rebound again in 2002 (45.3 percent). As shown in Table D.8, the lowmod shares do not change much when B&C home loans are excluded from the market definition; this is because B&C loans are mainly refinance loans.

It appears that the affordable lending market is even stronger today than when HUD wrote the 2000 Rule, which covered market data through 1998. The very-low-income and low-mod percentages were higher during 1999 to 2002 than they were during the earlier period. In addition, when HUD wrote the 2000 Rule, there had been five years (1994–98) of solid affordable lending for lower-income borrowers. Now, with four additional years of data for 1999–

2002, there have been nine years of strong affordable lending.

Of course, it is recognized that lending patterns could change with sharp changes in interest rates and the economy. However, the fact that lending to low-income families has remained at a high level for nine years demonstrates that the market has changed in fundamental ways from the mortgage market of the early 1990s. The numerous innovative products and outreach programs that the industry has developed to attract lowerincome families into the homeownership and mortgage markets appear to be working and there is no reason to believe that they will not continue to assist in closing troubling homeownership gaps that exist today. As explained in Appendix A, the demand for homeownership on the part of nontraditional borrowers, minorities, and immigrants should help to maintain activity in the affordable portion of the mortgage market. Thus, while economic recession or higher interest rates would likely reduce the low- and moderate-income share of mortgage originations, there is evidence that the lowmod market might not return to the low levels of the early 1990s. There is also evidence that the affordable lending market increased slightly since 1998, although it is recognized that this could be due to the recent period of historically low interest rates.

Refinance Mortgages. In the 2000 Rule, HUD's market projection model assumed that low-mod borrowers represented a smaller share of refinance mortgages than they do of home purchase mortgages. However, as shown in Table D.8, the income characteristics of borrowers refinancing mortgages seem to depend on the overall level of refinancing in the market. During the refinancing wave of 1992 and 1993, refinancing borrowers had much higher incomes than borrowers purchasing homes. For example, during 1993 low- and moderate-income borrowers accounted for 29.3 percent of refinance mortgages, compared to 38.9 percent of home purchase borrowers. While this same pattern was exhibited during the two recent refinancing periods (1998 and 2001-2002), the differentials were much smaller-during 2001-2002 (1998), low-mod borrowers accounted for 42.1 (39.7) percent of refinance loans, compared with 44.3 (43.0) percent of home purchase loans. However, the refinance effect was still evident, as can be seen by the almost seven percentage drop in the low-mod percentage for refinance loans between 2000 (a low refinance year) and 2001 (a high refinance year).

On the other hand, for recent years characterized by a low level of refinancing, the low-mod share of refinance mortgages has been about the same or even greater than that of home purchase mortgages. As shown in Table D.8, there was little difference in the very-low-income and low-mod shares of refinance and home purchase loans during 1995 and 1996. In 1997, 1999, and 2000, the two lower-income shares (*i.e.*, very-low-income and low-mod shares) of refinance mortgages were significantly higher than the lower-income shares of home purchase loans. To a certain extent, this pattern was

influenced by the growth of subprime loans, which are mainly refinance loans. If B&C loans are excluded from the market definition, the home purchase and refinance percentages are approximately the same in 1997 and 1999, as well as in 1995 and 1996. (See Table D.8.) Even after excluding all subprime loans from the market definition in 1997 and 1999, the very-low-income and low-mod shares for refinance loans are only slightly less (about one percentage point) than those for home purchase loans.

The year 2000 stands out because of the extremely high lower-income shares for refinance loans. In that year, the low-mod (very-low-income) share of refinance loans was 6.8 (4.3) percentage points higher than the low-mod (very-low-income) share of home purchase loans; this differential is reduced to 5.2 (3.2) percent if B&C loans are excluded from the market definition (see Table D.8). The differential for 2000 is reduced further to 2.8 (1.5) percent if all subprime loans (both A-minus and B&C) are excluded from the market definition (not reported). While the projection model (explained below) for years 2005-08 will input low-mod percentages for the entire conforming market, the model will exclude the effects of B&C loans. Sensitivity analyses will also be conducted showing the effects on the overall market estimates of excluding all subprime loans as well as other loan categories such as manufactured housing loans.

The projection model will initially assume that refinancing is 35 percent of the single-family mortgage market; this will be followed by projection models that reflect heavy refinance environments. Given the volatility of refinance rates from year to year, it is important to conduct sensitivity tests using different refinance rates.

b. Manufactured Housing Loans

Because manufactured housing loans are such an important source of affordable housing, they are included in the mortgage market definition in this appendix—or at least that portion of the manufactured housing market located in metropolitan areas is included, as HMDA doesn't adequately cover non-metropolitan areas. The GSEs have questioned HUD's including these loans in its market estimates; therefore, following the same procedure used in the 2000 Rule, this Appendix will report the effects of excluding manufactured home loans from the market estimates. As explained later, the effect of manufactured housing on HUD's metropolitan area market estimate for each of the three housing goals is approximately one percentage point or less.

As discussed in Appendix A, the manufactured housing market increased rapidly during the 1990s, as units placed in service increased from 174,000 in 1991 to 374,000 in 1999. However, due to various problems in the industry such as lax underwriting and repossessions, volume has declined in recent years, falling to 192,000 in 2001 and to 172,000 in 2002. Still, the affordability of manufactured homes for lower-income families is demonstrated by their average price of \$48,800 in 2001, a fraction of the median price for new (\$175,000) and existing (\$147,800) homes.

³¹The annual averages of the goals-qualifying mortgages reported in this appendix are unweighted averages; for analyses using weighted average see Appendix A.

Many households live in manufactured housing because they simply cannot afford site-built homes, for which the construction costs per square foot are much higher.

Although manufactured home loans cannot be identified in the HMDA data, Randy Scheessele at HUD identified 21 lenders that primarily originated manufactured home loans during 2001 and likely account for most of these loans in the HMDA data for metropolitan areas.³² HMDA data on home loans originated by these lenders indicate that:³³

- A very high percentage of these loans—75 percent in 2001—would qualify for the Low- and Moderate-Income Goal,
- A substantial percentage of these loans—
 42 percent in 2001—would qualify for the
 Special Affordable Goal, and
- Almost half of these loans—47 percent in 2001—would qualify for the Underserved Areas Goal.³⁴

Thus an enhanced presence in this market by the GSEs would benefit many lower-income families. It would also contribute to their presence in underserved rural areas, especially in the South.

2. Low- and Moderate-Income Percentage for Renter Mortgages

Following the 2000 Rule, measures of the rent affordability of the single-family rental and the multifamily rental markets are obtained from the American Housing Survey (AHS) and the Property Owners and Managers Survey (POMS). As explained below, the AHS provides rent information for the stock of rental properties while the POMS provides rent information for flow of mortgages financing that stock. As discussed below, the AHS and POMS data provide very similar estimates of the low- and moderate-income share of the rental market.

a. American Housing Survey Data

The American Housing Survey does not include data on mortgages for rental properties; rather, it includes data on the characteristics of the existing rental housing stock and recently completed rental properties. Current data on the income of prospective or actual tenants has also not been readily available for rental properties. Where such income information is not available, the 1992 GSE Act provides that the rent of a unit can be used to determine the affordability of that unit and whether it qualifies for the Low- and Moderate-Income Goal. A unit qualifies for the Low- and Moderate-Income Goal if the rent does not exceed 30 percent of the local area median income (with appropriate adjustments for

family size as measured by the number of bedrooms). Thus, the GSEs' performance under the housing goals is measured in terms of the affordability of the rental dwelling units that are financed by mortgages that the GSEs purchase; the income of the occupants of these rental units is not considered in the calculation of goal performance. For this reason, it is appropriate to base estimates of market size on rent affordability data rather than on renter income data.

A rental unit is considered to be "affordable" to low- and moderate-income families, and thus qualifies for the Low- and Moderate-Income Goal, if that unit's rent is equal to or less than 30 percent of area median income. Table D.14 of Appendix D in HUD's 2000 Rule reported AHS data on the affordability of the rental housing stock for the survey years between 1985 and 1997. The 1997 AHS showed that for 1-4 unit unsubsidized single-family rental properties, 94 percent of all units and of units constructed in the preceding three years had gross rent (contract rent plus the cost of all utilities) less than or equal to 30 percent of area median income. For multifamily unsubsidized rental properties, the corresponding figure was 92 percent. The AHS data for the other survey years were similar to the 1997 data.

b. Property Owners and Managers Survey (POMS)

As discussed in the 2000 GSE Rule, there were concerns about using AHS data on rents from the outstanding rental stock to proxy rents for newly mortgaged rental units. HUD investigated that issue further using the POMS.

POMS Methodology. The affordability of multifamily and single-family rental housing backing mortgages originated in 1993-1995 was calculated using internal Census Bureau files from the American Housing Survey-National Sample (AHS) from 1995 and the Property Owners and Managers Survey from 1995–1996. The POMS survey was conducted on the same units included in the AHS survey, and provides supplemental information such as the origination year of the mortgage loan, if any, recorded against the property included in the AHS survey. Monthly housing cost data (including rent and utilities), number of bedrooms, and metropolitan area (MSA) location data were obtained from the AHS file.

In cases where units in the AHS were not occupied, the AHS typically provides rents, either by obtaining this information from property owners or through the use of imputation techniques. Estimated monthly housing costs on vacant units were therefore calculated as the sum of AHS rent and utility costs estimated using utility allowances published by HUD as part of its regulation of the GSEs. Observations where neither monthly housing cost nor monthly rent was available were omitted, as were observations where MSA could not be determined. Units with no cash rent and subsidized housing units were also omitted. Because of the shortage of observations with 1995 originations, POMS data on year of mortgage origination were utilized to restrict the sample to properties mortgaged during 1993-1995. POMS weights were then applied to

estimate population statistics. Affordability calculations were made using 1993–95 area median incomes calculated by HUD.

POMS Results. The rent affordability estimates from POMS of the affordability of newly-mortgaged rental properties are quite consistent with the AHS data on the affordability of the rental stock (discussed above). Ninety-six (96) percent of singlefamily rental properties with new mortgages between 1993 and 1995 were affordable to low- and moderate-income families, and 56 percent were affordable to very-low-income families. The corresponding percentages for newly-mortgaged multifamily properties are 96 percent and 51 percent, respectively. Thus, these percentages for newly-mortgaged properties from the POMS are similar to those from the AHS for the rental stock. As discussed in the next section, the baseline projection from HUD's market share model assumes that 90 percent of newly-mortgaged, single-family rental and multifamily units are affordable to low- and moderate-income families.35

3. Size of the Low- and Moderate-Income Mortgage Market

This section provides estimates of the size of the low- and moderate-income mortgage market. Subsection 3.a provides some necessary background by comparing HUD's estimate made during the 2000 rule-making process with actual experience between 1999 and 2001. Subsection 3.b presents new estimates of the low-mod market while Subsection 3.c reports the sensitivity of the new estimates to changes in assumptions about economic and mortgage market conditions.

a. Actual Market Performance Between 1995 and 2002

Before reporting market projections for the new goals-setting period (2005-08), this section discusses actual market experience for 1995 to 2002, as shown in Table D.9.36 The 1995 to 1998 market estimates in Table D.9 were reported by HUD in its 2000 Rule while the 1999-2002 estimates are new. The 1999–2002 estimates allow a comparison between HUD's projections and actual market experience. This discussion of the 1995-to-2002 market considers all three housing goals, since the explanations for the differences between the projected and actual market shares are common across the three goals. B&C loans are not included in the market estimates reported in Table D.9. The discussion of Table D.9 will first focus on the market estimates for 1995-1997 and 1999-2000, which, because of their relatively low levels of refinancing, will be referred to as "home purchase environments". The discussion will then examine the market

³² See Randall M. Scheesele, 1998 HMDA Highlights, op. cit. and "HUD Subprime and Manufactured Home Lender List" at http:// huduseer.org/datasets/manu.html.

³³ Since most HMDA data are for loans in metropolitan areas and a substantial share of manufactured homes are located outside metropolitan areas, HMDA data may not accurately state the goals-qualifying shares for loans on manufactured homes in all areas.

³⁴ While many fewer manufactured homes loans were identified in the 2002 HMDA data, the loans showed similar goals-qualifying shares: low-mod (78.3 percent), special affordable (45.6 percent), and underserved areas (47.5 percent).

³⁵ In 2002, 75 percent of GSE purchases of singlefamily rental units and 89 percent of their purchases of multifamily units qualified under the Low- and Moderate-Income Goal, excluding the effects of missing data.

³⁶ The goals-qualifying shares reported in Table D.9 for 1995–2002 are, of course, estimates themselves; even though information is available from HMDA and other data sources for most of the important model parameters, there are some areas where information is limited, as discussed throughout this appendix.

estimates for the heavy refinance years of 1998, 2001, and 2002. After that, HUD's methods for adjusting the 1995–2001 market

data to exclude B&C loans and to incorporate the more expansive definition of

Underserved Areas in non-metropolitan areas will be explained.
BILLING CODE 4210–27–P

Table D.9

Goals-Qualifying Market Shares (Without B&C Loans)
1995-2002

•	1995	1996	1997	1998	6661	2000	2001	2002
I. Low-Mod Goal	573%	573 %	57.5 %	53.8 %	58.2 %	59.1 %	54.9 %	54 1 %
2. Special Affordable Goal	28.9	28.7	28.8	25.8	29.2	30.0	26.5	25.8
3. Underserved Area Goal (1990-Based)	33.9	33.4	33.9	31.0	33.9	35.3	32.6	32.0

Notes: See the text (a) for the method for excluding B&C loans from the market, and (b) for the explanation for increasing the metropolitan-area-based market share to incorporate underserved areas in non-metropolitan areas. This analysis is based on 1990 census geography for underserved areas. See Section G.4 for analysis of switching to 2000 census geography. HUD's market projections in the 2000 Rule were 50–55 percent for the Low- and Moderate-Income Goal, 23–26 percent for the Special Affordable Goal, and 29–32 percent for the Underserved Areas Goal. Thus, the upper bound figures for the market share ranges in the 2000 Rule were lower than actual experience during 1999 and 2000, as well as for the earlier 1995–97 period—for the low-mod estimate, 55 percent versus 57–59 percent; for the special affordable estimate, 26 versus 28–30 percent, and for the underserved areas estimate, 32 percent versus 33–35 percent.

There are three main reasons for the differential between HUD's earlier estimates (made during 2000 based on HMDA data through 1998) and the higher goals-qualifying market shares of recent years. First, historically low interest rates and strong economic expansion allowed lower-income families to enter the homeownership and mortgage market during the mid-to-late 1990s. Affordable home purchase lending continued during the past four years, at an even higher rate than earlier, particularly for the two borrower-income goals (low-mod and special affordable). The average low-mod percentage for home purchase loans during 1999-2002 was 44.6 percent, compared with 42.2 percent during 1995-98. Similarly, the average special affordable percentage for home purchase loans during 1999-2002 was 16.7 percent, compared with 15.1 percent during 1995-98. Thus, the home lending market for lower-income borrowers continued to grow. HUD's earlier estimates anticipated smaller shares of new mortgages being originated for lower-income families.

Second, HUD's projection model in the 2000 Rule assumed that refinance loans would have lower goals-qualifying percentages than home purchase loans; this assumption was based on the average homepurchase-refinance differential between 1992 and 1998. As discussed above, this has not been the case during "home purchase" years such as 1995-97 and 1999-2000. Thus, the projection model underestimates actual market experience when the goals-qualifying shares of refinance loans turn out to be equal or greater than the goals-qualifying shares of home purchase loans.³⁷ This issue will be addressed further in the sections that present the new market estimates.

Third, the financing of multifamily properties continued at strong levels during 1999 and 2000. HUD's baseline model in the 2000 Rule assumed a multifamily share of 15 percent, which was lower than the approximately 16–17 percent multifamily share during 1999 and 2000.³⁸ As discussed

throughout this appendix, the multifamily mix fell during the heavy refinance years.

Refinance Years. The goals-qualifying percentages for the heavy refinance years (1998, 2001 and 2002) are lower than those for the other years. For example, the low-mod market share was 54 percent in 1998 and 2002 and 55 percent in 2001—both estimates within HUD's earlier market share range of 50-55 percent.³⁹ The special affordable market share during 1998, 2001, and 2002 was 26 percent—which places it at the top end of ĤUD's earlier market range of 23-26 percent. The goals-qualifying percentages during 1998, 2001, and 2002 are, of course, lower than those for the "home purchase" years of 1995-97 and 1999-2000. For example, the special affordable market share of approximately 26 percent in 2001 and 2002 was 3-4 percentage points lower than the corresponding share in 1999 and 2000. There are three main reasons for this. First, the goals-qualifying shares for single-family refinance loans fall during heavy refinance years, as middle and upper income borrowers dominate that market. On the other hand, in low refinancing years, the goals-qualifying shares of refinance loans can equal or be greater than the goals-qualifying shares of home purchase loans. Second, and related, is the fact that subprime lending, which is characterized by relatively high goalsqualifying shares, accounts for a smaller portion of the single-family mortgage market during heavy refinance years. Although they were at a record dollar level (\$213 billion) during 2002, subprime originations accounted for only 8.6 percent of all singlefamily mortgages originated that year, compared with about 13 percent during 1999 and 2000. Finally, the high volume of singlefamily mortgages in a heavy refinance year reduces the share of multifamily rental units. For example, the multifamily share of all financed units was less than 14 percent in 1998, 2001, and 2002,40 compared to multifamily shares of 19 percent during

percentages for 2000, 2001, and 2002 were 84 percent, 89 percent, and 80 percent, respectively. Studies of the coverage of HMDA data through 1996 conclude that HMDA covers approximately 85 percent of the conventional conforming market, which suggests that HUD's model produces reasonable estimates of single-family-owner loans. For analysis of HMDA coverage, see Randall M. Scheesele, HMDA Coverage of the Mortgage Market, op. cit.

³⁹ As discussed in Section C.6 of this appendix, there is some uncertainty about the multifamily mix for the year 2002. The goals-qualifying shares reported in Table D.9 assume \$67.7 billion (the HUD New estimate) and an average loan amount of \$37,275; this produces a multifamily mix of 10.9 percent. Section C.6 discussed several other multifamily market and average loan amount estimates sfor 2002, each with a specific multifamily mixes. The low-mod, special affordable, and underserved areas shares for the other multifamily mixes discussed in Section C.6 are as follows: 11.5 percent (54.4, 26.0, 32.25), 11.3 percent (54.3, 25.9, 32.1), 11.0 percent (54.2, 25.8, 32.0), 10.7 percent (54.0, 25.7, 31.9), 10.4 percent (53.9, 25.6, 31.8), and 10.1 percent (53.8, 25.5, 31.8).

⁴⁰ Although data are not available yet, the multifamily share for 2003 will be lower than the approximately 11 percent in 2002. Senstivity analyses with lower multifamily mixes are provided below.

1995–97 and 16–17 percent during 1999–2000. Of course, this shift toward single-family loans reduces the goals-qualifying shares of the overall market.

B&C Mortgages. As discussed in Appendix A, the market for subprime mortgages has experienced rapid growth over the past 5–6 years, rising from an estimated \$65 billion in 1995 to \$174 billion in 2001 and \$213 billion in 2002. Table 9 provides goals-qualifying market shares that exclude the B&C portion of the subprime market; or conversely, that include the A-minus portion of the subprime market. This section explains how these "adjusted" market shares are calculated from "unadjusted" market shares that include B&C loans, using the year 1999 as an example.

Industry sources estimate that the subprime market totaled \$160 billion in 1999, or 12.5 percent of all mortgages (\$1,285 billion) originated that year.41 In terms of credit risk, this \$160 billion includes a wide range of mortgage types. "A-minus" loans, which represent at least half of the subprime market, make up the least risky category. 42 As discussed in Appendix A, the GSEs are involved in this market both through specific program offerings and through purchases of securities backed by subprime loans (including B&C loans as well as A-minus loans). The B&C loans experience much higher delinquency rates than A-minus loans.43

The procedure for excluding B&C mortgages from estimated "unadjusted" market shares for goals-qualifying loans in

³⁷ The 1995–2002 goals qualifying percentages for single-family mortgages are based on HMDA data for all (both home purchase and refinance) mortgages. Thus, the implicit refinance rate is that reported by HMDA for conventional conforming mortgages.

³⁸ The accuracy of a single-family portion of HUD's model can be tested using HMDA data. The number of single-family-owner loans reported to HMDA for the years 1999–2002 can be compared with the corresponding number predicted by HUD's model. Single-family-owner loans reported to HMDA during 1999 were 87 percent of the number of loans predicted by HUD's model; comparable

⁴¹ Estimates of the subprime market for other recent years are as follows (dollar and market share): 1995 (\$65 billion, 10 percent); 1996 (\$96.5 billion, 12.3 percent); 1997 (\$125 billion, 15 percent); 1998 (\$150 billion, 10 percent; 1999 (\$160 billion, 12.5 percent); 2001 (\$173 billion, 8.5 percent); 2002 (\$213 billion, 8.6 percent). The uncertainty about what these various estimates include should be emphasized; for example, they may include second mortgages and home equity loans as well as first mortgages, which are the focus of this analysis. The source for these estimates is *Inside Mortgage Finance* (various years).

⁴² The one-half assumption for A-minus loans is conservative because it probably underestimates (overestimates) the share of A-minus (B&C) loans. According to data obtained by the Mortgage Information Corporation (see next footnote), 57 percent of all subprime loans were labeled A-minus (as of September 30, 2000). According to Inside *B&C Lending*, which is published by Inside Mortgage Finance, the A-minus share of the subprime market was 61.6 percent in 2000, 70.7 percent in 2001 (see March 11, 2002 issue), 75 percent in 2002 (see the September 15, 2003 issue), and 82 percent during the first nine months of 2003 (see the December 8, 2003 issue).

⁴³ The Mortgage Information Corporation (MIC) reports the following serious delinquency rates (either 90 days past due or in foreclosure) by type of subprime loan: 3.36 percent for A-minus; 6.67 percent for B; 9.22 percent for C; and 21.03 percent for D. The D category accounted for only 2 percent of subprime loans and of course, is included in the category referred to in this appendix. By comparison, MIC reports a seriously delinquent rate of 3.63 percent for FHA loans. See MIC, The Market Pulse, Winter 2001, page 6. Also see "Subprime Mortgage Delinquencies Inch Higher, Prepayments Slow During Final Months of 1998", Inside MBS & ABS: Inside MBS & ABS, March 12, pages 8-11, where it is reported that fixed-rate A-minus loans have delinquency rates similar to high-LTV (over 95 percent) conventional conforming loans.

1999 combined information from several sources. First, the \$160 billion estimate for the subprime market was multiplied by 79.4 percent to arrive at an estimate of \$127 billion for subprime loans less than the year 1999 conforming loan limit of \$240,000; the 79.4 percent estimate for the conforming market was based on HMDA data for mortgages originated by subprime lenders. The \$127 billion was reduced by one-half to arrive at an estimate of \$63.5 billion for the conforming B&C market; with an average loan amount of \$78,801 (obtained from HMDA data, as discussed below), the \$63.5 billion represented approximately 806,081 B&C loans originated during 1999 under the conforming loan limit.

HMDA ďata was used to provide an estimate of the portion of these 806,081 B&C loans that would qualify for each of the housing goals. HMDA data does not identify subprime loans, much less divide them into their A-minus and B&C components. As explained in Appendix A, Randall Scheessele in HUD's Office of Policy Development and Research has identified almost 200 HMDA reporters that primarily originate subprime loans. The goalsqualifying percentages of the loans originated by these subprime lenders in 1999 were as follows: 63.0 percent qualified for the Lowand Moderate-Income Goal, 32.5 percent for the Special Affordable Goal, and 47.0 percent for the Underserved Areas Goal.44 Applying the goals-qualifying percentages to the estimated B&C market total of 806,081 gives the following estimates of B&C loans that qualified for each of the housing goals in 1999: Low- and Moderate Income (507,831), Special Affordable (261,976), and Underserved Areas (378,858).

Adjusting HUD's model to exclude the B&C market involves subtracting the above four figures' one for the overall B&C market and three for B&C loans that qualify for each of the three housing goals "from the corresponding figures estimated by HUD for the total single-family and multifamily market inclusive of B&C loans. HUD's model estimates that 10,638,797 single-family and multifamily units were financed during 1999; of these, 6,229,569 (58.6 percent) qualified for the Low- and Moderate-Income Goal. 3,133,701 (29.5 percent) for the Special Affordable Goal, and 3,711,271 (34.9 percent) for the Underserved Areas Goal. Deducting the B&C market estimates produces the following adjusted market estimates: a total market of 9,983.276, of which 5,721,738 (58.2 percent) qualified for the Low- and Moderate-Income Goal, 2,871,725 (29.2 percent) for the Special Affordable Goal, and 3,332,413 (33.9 percent) for the Underserved Areas Goal.

As seen, the low-mod market share estimate exclusive of B&C loans (58.2 percent) is practically the same as the original market estimate (58.6 percent), as is also the special affordable market estimate (29.5 percent versus 29.2 percent). This

occurs because the B&C loans that were dropped from the analysis had similar low-mod and special affordable percentages as the overall (both single-family and multifamily) market. For example, the low-mod share of B&C loans was projected to be 63.0 percent and HUD's market model projected the overall low-mod share to be 58.6 percent. Thus, dropping B&C loans from the market totals does not change the overall low-mod share of the market.

The situation is different for the Underserved Areas Goal. Underserved areas account for 47.0 percent of the B&C loans, which is a higher percentage than the underserved area share of the overall market (34.9 percent). Thus, dropping the B&C loans leads to a reduction in the underserved areas market share of 1.0 percentage points, from 34.9 percent to 33.9 percent.

Dropping B&C loans from HUD's model changes the mix between rental and owner units in the final market estimate. Based on assumptions about the size of the owner and rental markets for 1999, HUD's model calculates that single-family-owner units accounted for 71.4 percent of total units financed during 1999. Dropping the B&C owner loans, as described above, reduces the owner percentage of the market by 2.3 percentage points to 69.1 percent. Thus, another way of explaining why the goalsqualifying market shares are not affected so much by dropping B&C loans is that the rental share of the overall market increases as the B&C owner units are dropped from the market. Since rental units have very high goals-qualifying percentages, their increased importance in the market partially offsets the negative effects on the goals-qualifying shares of any reductions in B&C owner loans. In fact, this rental mix effect would come into play with any reduction in owner units from HUD's model

Dropping all subprime loans (both Aminus and B&C) from the market definition would lead to similar results for the Low-Mod and Special Affordable Goals "little change in the market estimates for the reasons given above (the low-mod estimate falls to 57.8 percent and the special affordable share falls to 28.9 percent). The market estimate for the Underserved Areas Goal would fall an additional 1.2 percentage points to 32.7 percent (or 2.2 percentage points lower than the overall estimate of 34.9 percent).

As discussed in the 2000 Rule, there are caveats that should be mentioned concerning the above adjustments for the B&C market for 1999. The adjustment for B&C loans depends on several estimates relating to the 1999 mortgage market, derived from various sources. Different estimates of the size of the B&C market in 1999 or the goals-qualifying shares of the B&C market could lead to different estimates of the goals-qualifying shares for the overall market. The goalsqualifying shares of the B&C market were based on HMDA data for selected lenders that primarily originate subprime loans; since these lenders are likely originating both Aminus and B&C loans, the goals-qualifying percentages used here may not be accurately measuring the goals-qualifying percentages for only B&C loans. The above technique of

dropping B&C loans also assumes that the coverage of B&C and non-B&C loans in HMDA's metropolitan area data is the same; however, it is likely that HMDA coverage of non-B&C loans is higher than its coverage of B&C loans. 45 Despite these caveats, it also appears that reasonably different estimates of the various market parameters would not likely change, in any significant way, the above estimates of the effects of excluding B&C loans in calculating the goals-qualifying shares of the market. As discussed below, HUD provides a range of estimates for the goals-qualifying market shares to account for uncertainty related to the various parameters included in its projection model for the mortgage market.

Adjustment for Non-Metropolitan Areas. HUD first estimated the underserved area percentage for 1999–2002 based on single-family-owner parameters for metropolitan areas. It was necessary to adjust these metropolitan-based market shares upward to reflect the fact that underserved counties account for a much larger portion of non-metropolitan areas than underserved census tracts do of metropolitan areas. The adjustment averaged about 1.5 percentage points; the method for deriving the upward adjustment is explained in Section G.3 below

Manufactured Housing Loans. HUD includes the effects of manufactured housing loans (at least those financing properties in metropolitan areas) in its market estimates. However, sensitivity analyses are conducted to determine the effects of excluding these loans. Excluding these loans from the market definition would reduce the 1995-2001 estimates of the three goals-qualifying market shares by approximately one percentage point. Assuming a home purchase environment (1995-97 and 1999-2000) and a constant mix of owner and rental properties, excluding manufactured housing loans (as well as loans less than \$15,000) would reduce the goals-qualifying shares reported in Table D.9 roughly as follows: Low- and Moderate-Income Goal by 1.2 percentage points, Special Affordable Goal by 1.0 percentage points, and Underserved Areas Goal by 0.8 percentage point. (The method for calculating these reductions is explained in Section F.3b below.) Dropping manufactured housing from the market totals would increase the rental share of the

⁴⁴The goals-qualifying percentages for subprime lenders are much higher than the percentages (46.3 percent, 18.3 percent, and 28.2 percent, respectively) for the overall single-family conventional conforming market in 1999. For further analysis of subprime lenders, see Randall M. Scheessele, *1998 HMDA Highlights, op. cit.*

⁴⁵ Dropping B&C loans in the manner described in the text results in the goals-qualifying percentages for the non-B&C market being underestimated since HMDA coverage of B&C loans is less than that of non-B&C loans and since B&C loans have higher goals-qualifying shares than non-B&C loans. For instance, the low-mod shares of the market reported in Table D.9 underestimate (to an unknown extent) the low-mod shares of the market inclusive of B&C loans; so reducing the low-mod owner shares by dropping B&C loans in the manner described in the text would provide an underestimate of the low-mod share of the non-B&C owner market. A study of 1997 HMDA data in Durham County, North Carolina by the Coalition for Responsible Lending (CRL) found that loans by mortgage and finance companies are often not reported to HMDA. For a summary of this study, see "Renewed Attack on Predatory Subprime Lenders" in Fair Lending/CRA Compass, June 9,

mortgage market, which would tend to increase the goals-qualifying shares and thus partially offset the reductions reported above. In addition, the estimated reductions in goals-qualifying shares due to excluding manufactured housing are even lower during the heavy refinance years such as 1998 and 2001. It should also be mentioned that manufactured housing in non-metropolitan areas is not included in HUD's analysis due to lack of data; including that segment of the market would increase the goals-qualifying shares of the overall market. Thus, the analyses of manufactured housing reported

above and throughout this proposed Rule pertain only to manufactured housing loans in metropolitan areas, as measured by loans originated by the 21 manufactured housing lenders identified by HUD.

b. Estimates of the Low- and Moderate-Income Market

This section provides HUD's estimates for the size of the low- and moderate-income mortgage market that will serve as a proxy for the four-year period (2005–2008) when the new housing goals will be in effect. Three alternative sets of projections about property shares and rental property low- and

moderate-income percentages are given in Table D.10. Case 1 projections represent the baseline and intermediate case; it assumes that investors account for 10 percent of the single-family mortgage market. Case 2 assumes a lower investor share (8 percent) based on HMDA data and slightly more conservative low- and moderate-income percentages for single-family rental and multifamily properties (85 percent). Case 3 assumes a higher investor share (12 percent) consistent with Follain and Blackley's suggestions.

Table D.10

Alternative Assumptions for Single-Family Rental and Multifamily Mortgage Shares

	Case 1	Case 2	Case 3
1. Single-Family Mortgage Shares			
Single-Family Owner-Occupied	88.0%	90.0%	85.6%
Single-Family 2-4	2.0%	2.0%	2.4%
Single-Family 1-4 Investor	10.0%	8.0%	12.0%
2. Units Per Single-Family Mortgage			
Single-Family 2-4	2.25	2.25	2.25
Single-Family 1-4 Investor	1.35	1.35	1.40
3. Percentage Affordable at Area			
Median Income (AMI)			
Single-Family Rental	90.0%	85.0%	95.0%
Multifamily	90.0%	85.0%	95.0%
4. Percentage Underserved (1990-Based)			
Single-Family Rental	42.5%	40.0%	45.0%
Multifamily	48.0%	46.0%	48.0%
5. Percent Affordable at 60% of AMI			
Single-Family Rental	50.0%	47.0%	53.0%
Multifamily	47.0%	44.0%	50.0%
Mutuanny	47.0%	44.0%	30.0%
6. Percentage Low-Income in			
Low-Income Areas:			<u>.</u>
Single-Family Rental	8.0%	6.0%	8.0%
Multifamily	11.0%	10.0%	12.0%

Note: The underserved area shares in # 4 are based on 1990 census tracts. See text for discussion of "2000-Based" underserved area shares based on 2000 census tracts.

Because single-family-owner units account for about 70 percent of all newly mortgaged dwelling units, the low- and moderateincome percentage for owners is the most important determinant of the total market estimate. Thus, Table D.11 provides market estimates for different low-mod percentages for the owner market as well as for different multifamily mix percentages—15.0 percent bracketed by 13.5 percent and 16.5 percent, which are the same multifamily mixes assumed in the 2000 Rule. The low-mod

market estimates in Table D.11 exclude B&C loans, in the same manner as discussed earlier for the 1995–2001 market estimates. This is explained further below.

Table D.11

Low- and Moderate-Income Market Estimates
Sensitivity Analysis

		Multifa	amily Mix (Perce	ent)
	rent Percentages for			
•	vner-Occupied's with	13.5%	15%	16.5%
Income Less than				
Single-Family: ^a	47%	58.4 %	59.0 %	59.6 %
	46%	57.6	58.2	58.8
	45%	56.8	57.5	58.1
	44%	56.1	56.7	57.3
	43%	55.3	55.9	56.6
	42%	54.5	55.2	55.8
	41%	53.7	54.4	55.1
	40%	52.9	53.6	54.3
	39%	52.2	52.9	53.6
	38%	51.4	52.1	52.8
	37%	50.6	51.3	52.0
	36%	49.8	50.6	51.3
	35%	49.0	49.8	50.5
	34%	48.3	49.0	49.8
Single-Family:	43% with:			
	Case 1 (above)	55.3 %	55.9 %	56.6 %
	Case 2	53.9	54.4	55.0
	Case 3	57.1	57.8	58.5
Single-Family:	40% with:			
	Case 1 (above)	52.9 %	53.6 %	54.3 %
	Case 2	51.5	52.1	52.8
	Case 3	54.8	55.5	56.2
Single-Family:	36% with:			
	Case 1 (above)	49.8 %	50.6 %	51.3 %
•	Case 2	48.4	49.1	49.7
	Case 3	51.7	52.5	53.3

^a See text for interpretation of single-family-owner percentages. AMI is area median income.

the increase in single-family mortgages, the multifamily share of the mortgage market typically falls during a heavy refinance environment; therefore, several sensitivity analyses using lower multifamily mixes are examined below.

In the 2000 Rule, HUD assumed that the low-mod share of refinance loans was three percentage points lower than the low-mod share of borrowers purchasing a home. However, as discussed earlier, the low-mod share of refinance loans has equaled or been greater than the low-mod share of home purchase loans during recent home purchase environments such as 1995–97 or 1999–2000; thus, the assumption of a lower low-mod shares for refinance loans is initially dropped for this analysis but will be reintroduced during the sensitivity analysis and during the discussion of heavy refinance environments.

There are two ways to view the singlefamily-owner low-mod percentages reported in the first column of Table D.11. A first approach would be to view them as representing low-mod percentages of only the home purchase market. For example, a lowmod percentage for home purchase loans of 43 percent (as it was say in 1997)—combined with the assumption of an equal low-mod share for refinance loans (i.e., also 43 percent) and with the other model assumptions (such as a multifamily mix of 15 percent)-produces an estimate of 55.9 percent for the low-mod share of the overall (owner and rental) market, excluding B&C loans. Thus, the reader can view Table D.11 as showing the overall low-mod market estimate once the reader specifies his or her views about the low-mod share of the singlefamily home purchase market (given the other model assumptions). In this case, if the reader believes that the low-mod share of refinance loans should be lower than that for home purchase loans, the reader simply has to multiply the differential amount by 0.35 (which is the refinance share of singlefamily-owner loans) and 0.722 (which is the single-family-owner share of all dwelling units in the baseline model that assumes a 15 percent multifamily mix). For example, applying the assumption in the 2000 Rule that the low-mod share is three percentage points lower for refinance loans would reduce the overall low-mod share of the market by 0.8 percentage points (3.0 times 0.35 times 0.722). In this manner, the reader can easily adjust the market estimates reported in Table D.11 to incorporate his or her own views about differences in the lowmod share of home purchase and refinance

A second approach would be to view the low-mod percentages (in the first column of Table D.11) as representing low-mod shares for the overall single-family-owner market, including both home purchase and refinance loans. This approach does not specify separate low-mod percentages for home purchase and refinance loans, but rather focuses on the overall single-family-owner environments. Thus, it allows for mortgage market environments where the low-mod share of refinance loans is greater than the low-mod share for home purchase loans. For example, a low-mod percentage for single-family-owner loans of 47 percent would

reflect the year 2000 environment, which had a low-mod home purchase percentage of 45 percent combined with a higher low-mod refinance percentage of 52 percent. Of course, the 47 percent low-mod share for the overall single-family-owner market could be consistent with other combinations of low-mod shares for home purchase and refinance loans. In this case, a 47 percent assumption for the overall single-family-owner market produces an estimate of 59.0 percent for the low-mod share of the overall (owner and rental) market, excluding B&C loans.

While both approaches will be discussed below, most of the discussion will focus on the first approach. It should be noted that several low-mod percentages of the owner market are given in Table D.11 to account for different perceptions of that market. Essentially, HUD's approach throughout this appendix is to provide several sensitivity analyses to illustrate the effects of different views about the goals-qualifying share of the single-family-owner market. This approach recognizes that there is some uncertainty in the data and that there can be different viewpoints about the various market definitions and other model parameters.

Market Estimates. As shown in Table D.11, the market estimate is: 57-58 percent if the owner percentage is 45 percent (home purchase share for 1999, 2000, and 2002); 55–57 percent if the owner percentage is 43 percent (home purchase share for 1998 and 2001); and 54-55 percent if the owner percentage is 42 percent (home purchase average from 1995-97). If the low- and moderate income percentage for home purchase loans fell to 38 percent-or five percentage points from its 1995–2001 average level of 43 percent—then the overall market estimate would be about 52 percent. Thus, 52 percent is consistent with a rather significant decline in the low-mod share of the single family home purchase market. If the low-mod percentage for home purchase loans fell further to 35 percent (or 8 percentage points below its 1995-2002 average of 43 percent), the overall market estimate would still be approximately 50 percent. Under the baseline projection, the home purchase percentage can fall as low as 34 percent—about fourfifths of the 1995-2002 average—and the low- and moderate-income market share would still be 49-50 percent.

The market estimates reported in Table D.11 for Case 2 and Case 3 bracket those for Case 1 (the baseline). The smaller single-family rental market and lower low- and moderate-income percentages for rental properties result in the Case 2 estimates being about one and a half percentage points below the Case 1 estimates. Conversely, the higher percentages under Case 3 result in estimates of the low-mod market approximately two percentage points higher than the Case 1 estimates. As discussed in Section D, the baseline Case 1 is a reasonable approach for estimating the market shares.

Multifamily Mix. The volume of multifamily activity is also an important determinant of the size of the low- and moderate-income market. HUD is aware of the uncertainty surrounding projections of the multifamily market and consequently recognizes the need to conduct sensitivity

analyses to determine the effects on the overall market estimate of different assumptions about the size of that market. As discussed in Section C of this appendix, the average multifamily share between 1991 and 2002 was approximately 16 percent, so 15 percent represents a slightly more conservative baseline. In addition, in singlefamily home purchase (or low refinancing) environments, the multifamily mix has typically been above 16 percent. Therefore, when considering single-family home purchase environments, it is probably more appropriate to focus on the top two multifamily mixes (15 percent and 16.5 percent) in Table D.11. Still, given the uncertainty surrounding the size of the multifamily market, it is useful to consider the effects of lower multifamily mix assumptions, even in a home purchase environment. Assuming a 13.5 percent multifamily mix reduces the overall low-mod market estimates by 0.6-0.7 percentage points compared with a 15 percent mix, and by 1.2–1.4 percentage points compared with a 16.5 percent mix. For example, when the low-mod share of the home purchase market is at 43 percent, the low-mod share of the overall market is 55.3 percent assuming a 13.5 percent multifamily mix, compared with 55.9 (56.6) percent assuming a 15 (16.5) percent multifamily mix. The next section examines the effects of multifamily mixes lower than 13.5 percent.

Heavy Refinancing Environments. As shown earlier in Table D.11, the low-mod share of the overall market declines when refinances dominate the market. Compared with low-mod market shares of 57-59 percent during recent home purchase environments (1995-97 and 1999-2000), the low-mod share declined to 54-55 percent during 1998, 2001, and 2002-three years where refinancing dominated the singlefamily-owner mortgage market. As explained earlier, this decline in the low-mod market share during heavy refinancing periods is due to (a) a decline in the low-mod share of single-family refinance mortgages as middleand upper-income borrowers dominate the refinance market; (b) a decline in the relative importance of the subprime market; and (c) a decline in the share of multifamily mortgages. For example, during 2001, the refinance share of low-mod loans fell to 41.8 percentage points (from about 49 percent during 1999 and 2000); the subprime share of the single-family market fell to 8.5 percent (from about 13 percent during 1999 and 2000); and the multifamily share of the market fell to 13.4 percent (from about 16 percent during 1999 and 2000). Similarly during 2002, the low-mod share of refinance loans was 42.3 percent, the subprime share of the market was 8.6 percent, and the multifamily mix was approximately 11 percent.

Several assumptions were changed to incorporate a refinance environment into the projection model for 2005–08. The refinance share of single-family mortgages was increased to 65 percent, or almost double the 35 percent refinance rate assumed in the projection model for a "home purchase" environment. The market share for subprime loans was assumed to be 8.5 percent and the

multifamily mix, 13.5 percent. The low-mod share for refinance loans was assumed to be 39 percent, or four percentage points below the assumed low-mod share of home purchase loans (which was set at the 1998 and 2002 level of 43 percent). Under these assumptions, the overall low-mod market share (excluding B&C loans) was projected to be 53.4 percent—or about 1-2 percentage points below the market shares estimated for 1998, 2001, and 2002. If the multifamily mix is reduced further to 12 (10) percent, the market projection falls to 52.7 (51.8) percent. If the single-family low-mod percentages are reduced to 41 percent (home purchase) and 37 percent (refinance), and the multifamily mix is 12 (10) percent, the overall low-mod market share falls 51.1 (50.2) percent. Since refinance environments are characterized by low interest rates, it is unlikely that the lowmod share of the home purchase market would fall below 41 percent, given that it has averaged 43 percent over the past eight years.

To further examine this issue in the context of an actual refinance environment, the various parameters (e.g., low-mod share of home purchase and refinance loans for owner and rental properties, the subprime share of the market, etc.) for the year 2002 were used except that the multifamily mix was lowered from the actual level in 2002. During 2002, there was a three percentage point differential between the low-mod share of home purchase loans (45.3 percent) and refinance loans (42.3 percent). As reported earlier, the low-mod share of the 2002 market was estimated to be 54.4 percent assuming a multifamily mix of 11.5 percent, and 10.9 percent assuming a multifamily mix of 10.9 percent. The multifamily mix for a year such as 2003, characterized by single-family originations of \$3.3 trillion, will certainly be lower than the 11 percent multifamily mix of 2002, characterized by \$2.5 trillion in singlefamily originations. Thus, this sensitivity analysis reduces the multifamily mix for the 2002 refinance environment. The low-mod shares vary with the multifamily mix as follows: (53.8 percent low-mod share, 10 percent multifamily mix); (53.3 percent, 9 percent); (52.9 percent, 8 percent); 52.5 percent, 7 percent); and (52.1 percent, 6 percent). Thus, under the actual 2002 assumptions, the low-mod share drops by about one-half percentage point for each one percentage point reduction in the multifamily mix.⁴⁶ The low-share remains above 52 percent even if the multifamily mix falls to 6 percent.47

The various market estimates presented in Table D.11 for a home purchase environment and reported above for a refinance environment are not all equally likely. Most of them equal or exceed 52 percent. In the home purchase environment, estimates below 52 percent would require the low-mod share of the single-family-owner market for home purchase loans to drop to 36-37 percent, which would be 6-7 percentage points below the average. Dropping below 52 percent would be more likely in a heavy refinance environment, as the actual estimated market shares during 1998, 2001, and 2002 were in the 54-55 percent range. However, sensitivity analyses of a refinance environment showed that a 52 percent lowmod market share was consistent with market assumptions more adverse than the heavy refinance years of 1998, 2001, and 2002

B&C Loans. There are two possible approaches for adjusting for the effects of B&C loans in the projection model. First, readers could choose a single-family lowmod percentage (that is, one of the percentages in the first column in Table D.11) that they believe is adjusted for B&C loans and then obtain a rough estimate of the overall market estimate from the second to fourth columns corresponding to different multifamily mixes. For instance, if one believes the appropriate single-family-owner percentage adjusted for B&C loans (or adjusted for any other market sectors that the reader thinks appropriate) is 39 percent, then the low-mod market estimate is 52.7 percent assuming a multifamily mix of 15 percent. While intuitively appealing, such an approach would provide inaccurate results, as explained next.

Second, readers could choose a singlefamily-owner percentage directly from HMDA data that is unadjusted for B&C loans and then rely on HUD's methodology (described below) for excluding the effects of B&C loans. This is the approach taken in Table D.11. The advantage of the second approach is that HUD's methodology makes the appropriate adjustments to the various property shares (i.e., the owner versus rental percentages) that result from excluding single-family B&C loans from the analysis. According to HUD's methodology, dropping B&C loans would reduce the various lowmod market estimates by less than half of a percentage point. This minor effect is due to (a) the fact that the low-mod share of B&C loans is similar to that of the overall market; and (b) the offsetting effects of the increase in the rental market share when single-family B&C loans are dropped from the market totals.

As noted above, if one assumes the single-family-owner percentages in the first column of Table D.11 are unadjusted for B&C loans, then the overall low-mod market estimates must be adjusted to exclude these loans. B&C loans were deducted in HUD's projection model using the same procedure described earlier for the 1995–2002 market estimation models. The effects of deducting the B&C loans from the projection model can be

the various property types were higher during 2002 than those assumed in the projection model.

illustrated using an example of a low-mod percentage of 43 percent for single-family-owner loans. Again, as explained earlier, this 43 percent figure could reflect a mortgage market environment where home purchase and refinance loans had similar low-mod percentages (i.e., 43 percent) or a mortgage market environment where home purchase and refinance loans had different low-mod market percentages that together resulted in a 43 percent average for the single-family-owner market.

As Table D.11 shows, a 43 percent lowmod share for owner mortgages translates into an overall low-mod market share of 55.9 percent. It is assumed that the subprime market accounts for 12 percent of all mortgages originated, which would be \$204 billion based on \$1,700 billion for the mortgage market. This \$204 billion estimate for the subprime market is reduced by 20 percent to arrive at \$163.2 billion for subprime loans that will be less than the conforming loan limit. This figure is reduced by one-half to arrive at \$81.6 billion for the conforming B&C market; with an average loan amount of \$129,899; the \$81.6 billion represents 628,180 B&C loans projected to be originated under the conforming loan limit.

Following the procedure discussed in Section F.3a, the low-mod share of the market exclusive of B&C loans is estimated to be 55.9 percent (see Table D.11), which is only slightly lower than the original (unadjusted) estimate of 56.1 percent. 48 As noted earlier, this occurs because the B&C loans that were dropped from the analysis had similar low-mod percentages as the overall (both single-family and multifamily) market (58.6 percent for excluded B&C loans versus 56.1 percent for the overall, unadjusted market estimate). The impact of dropping B&C loans is larger when the overall market share for low-mod loans is smaller. If the low-mod share for singlefamily owners is assumed to be 38 percent, dropping B&C loans would reduce the lowmod market share by 0.4 percentage points, from 52.5 percent to the 52.1 percent reported in Table D.11. Still, dropping B&C loans from the market totals does not change the overall low-mod share of the market appreciably.

Dropping B&C loans from HUD's projection model changes the mix between rental and owner units in the final market estimate;

⁴⁶ This analysis assumes the 2002 refinance rate of 62 percent; if the refinance rate is increased to 65–68 percent (current predictions for 2003), then the overall low-mod market percentages in this sentence would decline by about 0.1 percentage point. If there were a four (five) percentage point difference between the low-mod shares of home purchase and refinance loans, rather than a three percentage point difference as in 2002, then the overall low-mod market percentages in this sentence would decline by about 0.5 (1.0) percentage point.

⁴⁷ For a given multifamily mix, the low-mod shares of the market are higher under the simulations based on the 2002 environment, as compared with the simulations reported in the above paragraph based on the projection model. The reason for this is that the low-mod shares for

⁴⁸ 1999–2002 HMDA data for subprime lenders were used to provide an estimate of 58.6 percent for the portion of the B&C market that would qualify as low- and moderate-income. Applying the 58.6 percentage to the estimated B&C market total of 628,180 gives an estimate of 367,957 B&C loans that would qualify for the Low- and Moderate-Income Goal. Adjusting HUD's model to exclude the B&C market involves subtracting the 628,180 B&C loans and the 367,957 B&C low-mod loans from the corresponding figures estimated by HUD for the total single-family and multifamily market inclusive of B&C loans. HUD's projection model estimates that 10,632,145 single-family and multifamily units will be financed and of these, 5,962,527 (56.1 percent) will qualify for the Lowand Moderate-Income Goal. Deducting the B&C market estimates produces the following adjusted market estimates: a total market of 10,003,964 of which 5,594,570 (55.9 percent) will qualify for the Low- and Moderate-Income Goal.

rental units accounted for 29.6 percent of total units after dropping B&C loans compared with 27.8 percent before dropping B&C loans. Since practically all rental units qualify for the low-mod goal, their increased importance in the market partially offsets the negative effects on the goals-qualifying shares of any reductions in B&C owner loans.

A similar analysis can be used to demonstrate the effects of deducting the remaining, A-minus portion of the subprime market from the market estimates. Of course, deducting A-minus loans as well as B&C loans is equivalent to deducting all subprime loans from the market. In the example given above (43 percent low-mod percentage for owners), deducting all subprime loans would further reduce the overall low-mod market estimate to 55.7 percent. Thus, the unadjusted low-mod market estimate is 56.1 percent, the estimate adjusted for B&C loans is 55.9 percent (reported in Table D.11), and the estimate adjusted for all subprime loans is 55.7 percent.

Section F.3.a discussed several caveats concerning the analysis of subprime loans. It is not clear what types of loans (e.g., first versus second mortgages) are included in the subprime market estimates. There is only limited data on the borrower characteristics of subprime loans and the extent to which these loans are included in HMDA is not clear. Still, the above analysis demonstrates that the projection model can incorporate the effects of dropping B&C loans (or even all subprime loans) from the final market estimates.

Manufactured Housing Loans. Excluding manufactured housing loans (as well as small loans less than \$15,000) reduces the overall market estimates reported in Table D.11 by one-percentage point. This is estimated as follows. First, excluding these loans reduces the unadjusted low-mod percentage for single-family-owner mortgages in metropolitan areas by about 1.8 percentage points, based on analysis of recent home purchase environments (1995-97 and 1999 and 2000). Multiplying this 1.8 percentage point differential by the property share (0.722) of single-family-owner units yields 1.3 percentage points, which serves as a proxy for the reduction in the overall lowmod market share due to dropping manufactured home loans from the market analysis. The actual reduction will be somewhat less because dropping manufactured home loans will increase the share of rental units, which increases the overall low-mod market share, thus partially offsetting the 1.3 percent reduction. The net effect is probably a reduction of about one percentage point.

The above analysis of the effects of dropping different categories of loans from the market suggest that 52–58 percent is a reasonable range of estimates for the low- and moderate-income market. This range covers markets without B&C and allows for market environments that would be much less affordable than recent market conditions. The next section presents additional analyses related to market volatility and affordability conditions. After that, a one-percentage point downward adjustment is made to the 52–58 percent market range to reflect the

anticipated effects of re-benchmarking metropolitan area incomes based on 2000 Census data and incorporating the new OMB definitions for metropolitan areas.

c. Economic Conditions, Market Estimates, and the Feasibility of the Low- and Moderate-Income Housing Goal

During the 2000 rule-making, there was a concern that the market share estimates and the housing goals failed to recognize the volatility of housing markets and the existence of macroeconomic cycles. There was particular concern that the market shares and housing goals were based on a period of economic expansion accompanied by record low interest rates and high housing affordability. This section discusses these issues, noting that the Secretary can consider shifts in economic conditions when evaluating the performance of the GSEs on the goals, and noting further that the market share estimates can be examined in terms of less favorable market conditions than have existed during the 1993 to 2002 period.

Volatility of Market. Changing economic conditions can affect the validity of HUD's market estimates as well as the feasibility of the GSEs' accomplishing the housing goals. The volatile nature of the mortgage market in the past few years suggest a degree of uncertainty around projections of the origination market. Large swings in refinancing, consumers switching between adjustable-rate mortgages and fixed-rate mortgages, and increased first-time homebuyer activity due to record low interest rates, have all characterized the mortgage market during the nineties. These conditions are beyond the control of the GSEs but they would affect their performance on the housing goals. A mortgage market dominated by heavy refinancing on the part of middleincome homeowners would reduce the GSEs' ability to reach a specific target on the Lowand Moderate-Income Goal, for example. A jump in interest rates would reduce the availability of very-low-income mortgages for the GSEs to purchase. But on the other hand, the next few years may be favorable to achieving the goals because of the high refinancing activity in 2001, 2002, and 2003. A period of low-to-moderate interest rates would sustain affordability levels without causing the rush to refinance seen earlier in 1998 and 2001-2003. A high percentage of potential refinancers have already done so, and are less likely to do so again. However, these same predictions were made after the 1998 refinance wave, which indicates the uncertainty of making predictions about the mortgage market.

HUD conducted numerous sensitivity analyses of the market shares, several of which were described in Section F.3b above. The starting point of HUD's estimates is the projected \$1,700 billion in single-family originations. Increasing the single-family mortgage origination forecast while holding the multifamily origination forecast constant is equivalent to reducing the multifamily mix. Increasing the single-family projection by \$200 billion, from \$1,700 billion to \$1,900 billion, would reduce the market share for the Low- and Moderate-Income Goal by approximately 0.6 percentage point, assuming the other baseline assumptions

remain unchanged. A \$400 billion increase would reduce the low-mod projected market share by one percentage point. These reductions in the low-mod share of the mortgage market share occur because the multifamily mix is reduced from 15 percent to 13.6 percent to 12.5 percent. As explained in Section E, the absolute volume of single-family originations (such as the \$1,700 billion) is not as important as the relative shares of single-family and multifamily rental units.

Recent years have been characterized by record affordability conditions due to low interest rates and economic expansion. Thus, HUD also examined potential changes in the market shares under very different macroeconomic environments, including periods of recession, high interest rates, and heavy refinancing (accompanied by low interest rates). A recessionary environment would likely be characterized by a reduction in single-family activity (or an increase in the multifamily share of the market) and a reduction in the low-mod shares of the single-family-owner market. The low- and moderate-income share of the home purchase market was reduced to 34 percent, or 10.6 percentage points lower than its 1999-2002 average share. Under these rather severe conditions, the overall market share for the Low- and Moderate-Income Goal would decline to 49.0 (49.8) percent, assuming a multifamily mix of 15.0 (16.5) percent. If the low-mod share of the owner market were reduced more modestly to 37 percent, the low-mod share for the overall market would fall to 51.3 percent assuming a multifamily mix of 15.0 percent. (See Table D.11.)

As explained above, several heavy refinance environments were simulated. As a way of examining more extreme refinance environments than 2002, the effects of reducing the multifamily mix for the 2002 refinance environment were examined. The low-mod shares varied with the multifamily mix from 53.8 percent low-mod share with a 10 percent multifamily mix to 52.1 percent with a 6 percent multifamily mix. Under the actual 2002 market assumptions, the low-mod share drops by about one-half percentage point for each one percentage point reduction in the multifamily mix. ⁴⁹

⁴⁹This analysis assumes the 2002 refinance rate of 62 percent; if the refinance rate is increased to 65-68 percent (current predictions for 2003), then the overall low-mod market percentages in this sentence would decline by about 0.1 percentage point. If there were a four (five) percentage point difference between the low-mod shares of home purchase and refinance loans, rather than a three percentage point difference as in 2002, then the overall low-mod market percentages in this sentence would decline by about 0.5 (1.0) perecentage point. In addition, due to the uncertainty surrounding estimates of the investor share of the single-family mortgage market (see Section D), the analysis assumes a constant 10 percent share for investors; if the investor share is reduced to 8 percent during a refinance environment, the estimated low-mod share of the market would fall about one percentage point. This figure is obtained by multiplying the low-mod percentage differential between owner and investor mortgages (about 47 percent) by the resulting decimal point increase in the share of owner units (.021 as shown in Table D.7).

Affordability Conditions and Market Estimates. As discussed in Appendix A, record low interest rates, a more diverse socioeconomic group of households seeking homeownership, and affordability initiatives of the private sector have encouraged firsttime buyers and low-income borrowers to enter the market since the mid-1990s. A significant increase in interest rates over recent levels would reduce the presence of low-income families in the mortgage market and the availability of low-income mortgages for purchase by the GSEs. As discussed above, the 52-58 percent range for the lowmod market share covers economic and market affordability conditions much less favorable than recent conditions of low interest rates and economic expansion. The low-mod share of the single-family home purchase market could fall to 38 percent, which is 5.2 percentage points lower than its 1995-2002 average level of 43.2 percent, before the baseline market share for the Lowand Moderate-Income Goal would below 52

Feasibility Determination. As stated in the 2000 Rule, HUD is well aware of the volatility of mortgage markets and the possible impacts on the GSEs' ability to meet the housing goals. FHEFSSA allows for changing market conditions.50 If HUD has set a goal for a given year and market conditions change dramatically during or prior to the year, making it infeasible for the GSE to attain the goal, HUD must determine "whether (taking into consideration market and economic conditions and the financial condition of the enterprise) the achievement of the housing goal was or is feasible." This provision of FHEFSSA clearly allows for a finding by HUD that a goal was not feasible due to market conditions, and no subsequent actions would be taken. As HUD noted in both the 1995 and 2000 GSE Rules, it does not set the housing goals so that they can be met even under the worst of circumstances. Rather, as explained above, HUD has conducted numerous sensitivity analyses for economic and market affordability environments much more adverse than has existed in recent years. If macroeconomic conditions change even more dramatically, the levels of the goals can be revised to reflect the changed conditions. FHEFSSA and HUD recognize that conditions could change in ways that require revised expectations.

d. New 2000 Census Data and New OMB Metropolitan Area Definitions

Going forward, HUD will be rebenchmarking its median incomes for metropolitan areas and non-metropolitan counties based on 2000 Census median incomes, and will be incorporating the effects of the new OMB metropolitan area definitions. HUD projected the effects of these two changes on the low- and moderate-income shares of the single-family-owner market for the years 1999–2002. Under the historical data, the average low-mod share of the conventional conforming market was 44.6 percent for home purchase loans

(unweighted average of 1999-2002 percentages in Table D.8); the corresponding average with the projected data was 43.4 percent, yielding a differential of 1.2 percentage points. For home purchase loans in the conventional conforming market, the projected low-mod percentages for each year between 1999 and 2002 were as follows (with the historical data from Table D.8 in parentheses): 44.4 (45.2) percent for 1999; 44.2 (44.8) percent for 2000; 41.8 (43.2) percent for 2001; and 43.3 (45.3) percent for 2002. The differentials between the projected and historical data are larger in 2001 (1.4 percentage points) and 2002 (2.0 percentage points) than in 1999 (0.8 percentage point) and 2000 (0.6 percentage point). For total (both home purchase and refinance) loans, the average low-mod share of the conventional conforming market based on historical data was 44.8 percent (unweighted average of 1999-2002 percentages in Table D.8); the corresponding average with the projected data was 43.6 percent, again yielding a differential of 1.2 percentage points, with the same pattern exhibited for the annual differentials. 51 It appears that the low-mod share for single-family-owners in the conventional conforming market will be at least one percentage point less due to the re-benchmarking of area median incomes and the new OMB definitions of metropolitan

For the other two property types (singlefamily rental and multifamily), comparisons between projected and historical low-mod percentages were made using the GSEs' data. For single-family rental mortgages, the unweighted average of Fannie Mae's (Freddie Mac's) low-mod percentage for the years 1999 to 2002 was 87.8 (88.1) percent using the projected data, compared with 87.7 (88.1) percent using the historical data. For multifamily mortgages, the unweighted average of Fannie Mae's (Freddie Mac's) lowmod percentage for the years 1999 to 2002 was 92.1 (90.3) percent using the projected data, compared with 92.9 (92.6) percent using the historical data. These comparisons suggest little difference between the projected and historical low-mod shares for rental properties. HUD also projected the overall low-mod goal percentage for each GSE. For the overall low-mod goal (considering all three property types), the unweighted average of Fannie Mae's (Freddie Mac's) low-mod percentage for the years 1999 to 2002 was 48.5 (47.1) percent using the projected data, compared with 49.1 (47.9) percent using the historical data. Compared with the historical data, the projected data reduces Fannie Mae's average low-mod percentage by 0.6 percentage points, and Freddie Mac's by 0.8 percentage point.

Based on the above analysis, it appears the low-mod share of the conventional conforming market is about one percentage point less when based on projected data, as compared with historical data. Thus, it seems appropriate to drop the 52–58 percent market range to 51–57 percent.

e. Conclusions About the Size of Low- and Moderate-Income Market

Based on the above findings as well as numerous sensitivity analyses, HUD concludes that 51–57 percent is a reasonable range of estimates of the mortgage market's low- and moderate-income share for the year 2005 and beyond. This range covers much more adverse economic and market affordability conditions than have existed recently, allows for different assumptions about the multifamily market, and excludes the effects of B&C loans. HUD recognizes that shifts in economic conditions and refinancing could increase or decrease the size of the low- and moderate-income market during that period.

G. Size of the Conventional Conforming Market Serving Central Cities, Rural Areas, and Other Underserved Areas

The following discussion presents estimates of the size of the conventional conforming market for the Central City, Rural Areas, and other Underserved Areas Goal; this housing goal will also be referred to as the Underserved Areas Goal. The first three sections, which analyze historical data going back to the early 1990's, necessarily used 1990 Census geography to define underserved census tracts and underserved counties. The first two sections focus on underserved census tracts in metropolitan areas, as Section 1 presents underserved area percentages for different property types while Section 2 presents market estimates for metropolitan areas. Section 3 discusses B&C loans and rural areas. But as explained in Appendix B, HUD will be defining underserved areas based on 2000 Census geography beginning in 2005, the first year covered by this proposed rule. Therefore, Section 4 repeats much of the analyses in Sections 1–3 but in terms of 2000 Čensus geography, rather than 1990 Census geography.

1. Underserved Areas Goal Shares by Property Type

For purposes of the Underserved Areas Goal, underserved areas in metropolitan areas are defined as census tracts with:

(a) Tract median income at or below 90 percent of the MSA median income; or

(b) A minority composition equal to 30 percent or more and a tract median income no more than 120 percent of MSA median income

Owner Mortgages. The first set of numbers in Table D.12 are the percentages of single-family-owner mortgages that financed properties located in underserved census tracts of metropolitan areas between 1992 and 2002. There are several interesting patterns in these data. During 1999 and 2000, 28–30 percent of mortgages (both home purchase and refinance loans) financed properties located in these areas; this percentage fell to 25.7 percent in 2001 and 25.2 percent in 2002, figures that were slightly below the average (26.8 percent) between 1994 and 1998. In 1992 and 1993,

⁵⁰ Section 1336(b)(3)(A).

⁵¹ Between 1999 and 2002, the average singlefamily-owner differential between the historical and projected low-mod percentages was 1.1 percentage

point for Fannie Mae and 1.3 percentage point for Freddie Mac.

the underserved areas share of single-family-owner mortgages was only 20 percent. BILLING CODE 4210–27–P

Table D.12

Underserved Area Share of Mortgage Market In Metropolitan Areas: 1992-2002 HMDA Data

	Purch	ase	Refina	псе	To	otal
Single-Family-Owner	Conforming Market	Market W/O B&C Loans	Conforming Market	Market W/O B&C Loans	Conforming Market	Market W/O B&C Loans
1992	22.2 %	22.2 %	20.1 %	20.0 %	20.8 %	20.7 %
1993	21.9	21.9	19.5	19.4	20.2	20.1
1994	24.4	24.3	27.5	26.9	25.8	25.5
1995	25.5	25.4	29.3	28.3	26.9	26.4
1996	25.0	24.9	28.7	27.4	26.7	26.0
1997	25.2	24.9	30.8	28.9	27.8	26.7
1998	24.6	24.2	24.9	23.4	24.8	23.7
1999	25.8	25.2	30.4	28.5	28.2	26.9
2000	27.1	26.4	35.2	33.2	30.3	28.9
2001	25.8	25.2	25.6	24.7	25.7	24.9
2002	27.2	26.4	24.4	23.5	25.2	24.3
Non-Owner						
1992					42.4	
1993	39.3		41.1		40.4	
1994	39.6		46.7		43.0	
1995	40.1		50.1		43.7	
1996	39.7		48.8		43.5	
1997	40.5		51.2		45.0	
1998	40.3		46.5		43.6	
1999	41.6		51.2		46.1	
2000	42.6		56.8		47.4	
2001	41.3		46.8		44.2	
2002	42.1		45.8		44.2	
Multifamily ¹						i
1992					50.2	
1993					47.1	
1994					51.0	
1995					47.8	
1996					48.5	
1997					48.0	
1998					47.0	
1999					49.7	
2000					51.6	
2001					52.7	
2002					55.0	

Source: HMDA data for metropolitan areas. See text for definition of underserved areas and for the method for excluding B&C loans from the market.

¹ A purchase/refinance breakdown is not available for multifamily.

In most years, refinance loans are more likely than home purchase loans to finance properties located in underserved census tracts. Between 1994 and 2002, 28.5 percent of refinance loans were for properties in underserved areas, compared to 25.6 percent of home purchase loans. This refinancehome-purchase differential is mostly due to the influence of subprime loans. Excluding B&C (all subprime) loans and considering the same time period, 27.2 (25.6) percent of refinance loans were for properties in underserved areas, compared to 25.2 (24.8) percent of home purchase loans. In the year (2000) with the largest differential, excluding B&C (all subprime) loans reduced the refinance-home-purchase differential from 8.1 percent to 6.8 (4.9) percent; in this case, a significant differential remained after excluding B&C (subprime) loans. In the heavy refinance years of 1998, 2001, and 2002, underserved areas accounted for 25-27 percent of both home purchase and refinance

The underserved areas share for home purchase loans has been in the 25–26 range since 1995, except for 2000 and 2002 when it increased to slightly over 27 percent.

Considering all (both home purchase and refinance) loans during recent "home purchase" environments, the underserved areas share was a high 28-30 percent during 1999–2000, compared with a 27.1 percent average between 1995 and 1997; excluding B&C and other (i.e., A-minus) subprime loans places 1999 on par with the earlier years, with only the year 2000 showing a higher level of underserved area lending than occurred during 1995-97. These data indicate that the single-family-owner market in underserved areas has remained strong since the 2000 Rule was written. While it is recognized that economic and housing affordability conditions could change and reduce the size of the underserved areas market, it appears that the underserved market has certainly maintained itself at a high level over the past four years.

Renter Mortgages. The second and third sets of numbers in Table D.12 are the underserved area percentages for single-family rental mortgages and multifamily mortgages, respectively. Based on HMDA data for single-family, non-owner-occupied (investor) loans, the underserved area share of newly-mortgaged single-family rental units

has been in the almost 45 percent range over the past nine years. HMDA data also show that about half of newly-mortgaged multifamily rental units are located in underserved areas.

2. Market Estimates for Underserved Areas in Metropolitan Areas

In the 2000 GSE Rule, HUD estimated that the market share for underserved areas would be between 29 and 32 percent. This estimate turned out to be below market experience, as underserved areas accounted for approximately 32-35 percent of all mortgages originated in metropolitan areas between 1999 and 2002 (see Table D.9). One reason for the underestimation of 1999-2002 experience was that the underserved areas share of the single-family-owner market continued to increase during this period of low interest rates. Table D.13 reports HUD's new estimates of the market share for underserved areas based on the projection model discussed earlier.52 The estimates in Table D.13 exclude the effects of B&C loans. BILLING CODE 4210-27-P

⁵² Table D.13 presents estimates for the same combinations of projections used to analyze the Low- and Moderate-Income Goal. Table D.10 in Section F.3 defines Cases 1, 2, and 3; Case 1 (the baseline) projects a 42.5 percent share for single-family rentals and a 48 percent share for multifamily properties while the more conservative Case 2 projects 40 percent and 46 percent, respectively.

Table D.13

Underserved Area Market Estimates
Sensitivity Analysis

		Multifamily Mix (Percent)				
Case 1 with Different Underserved						
Areas Percentages for Single-Family		13.5%	15%	16.5%		
Owner-Occupied's:						
Single-Family Owner: a	30%	34.7 %	35.0 %	35.2 %		
	29%	33.9	34.2	34.5		
	28%	33.1	33.4	33.7		
	27%	32.4	32.7	33.0		
	26%	31.6	31.9	32.2		
	25%	30.8	31.1	31.5		
	24%	30.0	30.4	30.7		
	23%	29.2	29.6	30.0		
	22%	28.4	28.8	29.2		
	21%	27.7	28.1	28.5		
	20%	26.9	27.3	27.7		
	19%	26.1	26.5	27.0		
	18%	25.3	25.8	26.2		
Single-Family Owner:	25% with:					
	Case 1 (above)	30.8 %	31.1 %	31.5 %		
	Case 2	30.2	30.5	30.8		
	Case 3	31.3	31.6	32.0		
Single-Family Owner:	22% with:					
	Case 1 (above)	28.4 %	28.8 %	29.2 %		
	Case 2	27.8	28.2	28.5		
	Case 3	29.0	29.3	29.7		

See text for definitions of underserved areas and for the interpretation of single-family-owner percentages. The underserved area data are based on 1990 geography.

These percentages are assumed to be the overall (both home purchase and refinance) percentages of single-family owner mortgages in underserved census tracts.

The percentage of single-family-owner mortgages financing properties in underserved areas is the most important determinant of the overall market share for this goal. Therefore, Table D.13 reports market shares for different single-familyowner percentages ranging from 30 percent (2000 level) to 20 percent (1993 level) to 18 percent. If the single-family-owner percentage for underserved areas is at its 1994-2002 HMDA average of 27 percent, the market share estimate is 32-33 percent. The overall market share for underserved areas peaks at 35 percent when the single-familyowner percentage is at its 2000 level of 30 percent. Most of the estimated market shares for the owner percentages that are slightly below recent experience are in the 30 percent

Unlike the Low- and Moderate-Income Goal, the market estimates differ only slightly as one moves from Case 1 to Case 3 and from a 13.5 percent mix to 16.5 percent mix. For example, reducing the assumed multifamily mix from 16.5 percent to 13.5 percent reduces the overall market projection for underserved areas by only about 0.6 percentage points. This is because the underserved area differentials between owner and rental properties are not as large as the low- and moderate-income differentials reported earlier.

Additional sensitivity analyses were conducted to reflect the volatility of the economy and mortgage market. Recession and high interest rate scenarios assumed a significant drop in the underserved area percentage for single-family-owner mortgages. The single-family-owner percentage can go as low as 24 percentwhich is 3 percentage points lower than the 1994-2002 average of 27 percent—and the estimated market share for underserved areas remains over 30 percent. In a more severe case, the overall underserved market share would be 28 percent if the single-family owner share fell to 21 percent (its 1992 level), which is 8-9 percentage points lower than its 1999-2000 levels. The heavy refinance scenarios discussed for the low-mod market were also projected for the underserved areas market. With a 65 percent refinance rate and an assumed 24 percent underserved area percentage for owner mortgages, the projection model produced overall market estimates that ranged from 32.6 percent (multifamily mix of 13.5 percent) to 31.7 percent (multifamily mix of 9 percent). Lowering the multifamily mix in the heavy refinance model characterized by year 2002 assumptions produced the following range of estimates for the overall underserved areas market: 32.1 percent (multifamily mix of 11.0 percent) to 31.2 percent (multifamily mix of 8 percent) to 30.7 percent (multifamily mix of 6 percent).53 In the refinance scenarios, the underserved areas market share was typically

at or slightly above 30 percent, which is similar to its market share during 1998 (31.0 percent) but somewhat less than its market share during 2001 (32.6 percent) and 2002 (32.0 percent).

3. Adjustments: B&C Loans, the Rural Underserved Areas Market, and Manufactured Housing Loans

B&C Loans. The procedure for dropping B&C loans from the projections is the same as described in Section F.3.b for the Lowand Moderate-Income Goal. The underserved area percentage for B&C loans is 44.5 percent, which is much higher than the projected percentage for the overall market (which peaks at 35 percent as indicated in Table D.13). Thus, dropping B&C loans will reduce the overall market estimates. Consider the case of a single-family-owner percentage of 27 percent, which yields an overall market estimate for underserved areas of 33.4 percent, including B&C loans. When B&C loans are excluded from the projection model, the underserved areas market share falls by 0.7 percentage points to 32.7 percent, which is the figure reported in Table D.13.

Non-metropolitan Areas. Underserved rural areas are non-metropolitan counties with:

(a) County median income at or below 95 percent of the greater of statewide nonmetropolitan median income or nationwide non-metropolitan income; or

(b) A minority composition equal to 30 percent or more and a county median income no more that 120 percent of statewide nonmetropolitan median income.

HMDA's limited coverage of mortgage data in non-metropolitan counties makes it impossible to estimate the size of the mortgage market in rural areas. However, all indicators suggest that underserved counties in non-metropolitan areas comprise a larger share of the non-metropolitan mortgage market than the underserved census tracts in metropolitan areas comprise of the metropolitan mortgage market. For instance, underserved counties within rural areas include 54 percent of non-metropolitan homeowners; on the other hand, underserved census tracts in metropolitan areas account for only 34 percent of metropolitan homeowners.

During 1999-2001, 36-39 percent of the GSEs' total purchases in non-metropolitan areas were in underserved counties while 25–30 percent of their purchases in metropolitan areas were in underserved census tracts. These figures suggest the market share for underserved counties in rural areas is higher than the market share for underserved census tracts in metropolitan areas. Thus, using a metropolitan estimate to proxy the overall market for this goal, including rural areas, is conservative. Between 1999 and 2001, the nonmetropolitan portion of the Underserved Areas Goal has contributed 1.1 to 1.4 (0.7 to 1.3) percentage points to Freddie Mac's (Fannie Mae's) performance, compared with a goals-counting system that only included metropolitan areas.

The limited HMDA data available for nonmetropolitan counties also suggest that the underserved areas market estimate would be

higher if complete data for non-metropolitan counties were available. According to HMDA, underserved counties accounted for 41-45 percent (or 42.7 percent) of all mortgages originated in non-metropolitan areas between 1999 and 2002. By contrast, underserved census tracts accounted for approximately 24-33 percent (or 27.4 percent) of all mortgages originated in metropolitan areas between 1999 and 2002.54 Assuming that non-metropolitan areas account for 13 percent of all single-familyowner mortgages and estimating that the single-family-owner market for accounts for 72 percent of newly-mortgaged dwelling units, then the non-metropolitan underserved area differential of approximately 15 percent would raise the overall market estimate by 1.4 percentage point—15 percentage points times 0.13 (non-metropolitan area mortgage market share) times 0.72 (single-family owner mortgage market share). Based on this calculation, if the 15 point differential reflected actual market conditions, then the underserved areas market share estimated using metropolitan area data should be increased by 1.4 percentage points to account for the effects of underserved counties in non-metropolitan areas.⁵⁵ A more conservative adjustment of 1.25 percentage points was made in Table D.13 for the projection model.56

Manufactured Housing Loans. Excluding

manufactured housing loans (as well as small loans less than \$15,000) reduces the overall underserved area market estimates reported in Table D.13 by less than one percentage point. This is estimated as follows. First, excluding these loans reduces the unadjusted underserved areas percentage for singlefamily-owner mortgages in metropolitan areas by about 1.2 percentage points, based on analysis of recent home purchase environments (1995-97 and 1999 and 2000). Multiplying this 1.2 percentage point differential by the property share of singlefamily-owner units (72.2 percent) yields 0.8 percentage points, which serves as a proxy for the reduction in the overall underserved area market share due to dropping manufactured home loans from the market analysis. The actual reduction will be somewhat less because dropping

⁵³ During 2002, the underserved areas share was 27.2 percent for home purchase loans and 24.4 percent for refinance loans, yielding a differential of 2.8 percentage points. Increasing the differential to 4 percentage points (by reducing the underserved area share of refinance loans to 23.2 percent) would reduce the overall underserved areas market percentages reported in the text by about 0.6 percentage point.

⁵⁴ These data do not include loans originated by lenders that specialize in manufactured housing loans, as well as estimated B&C loans. The averages in this and the preceding sentence are annual unweighted averages.

⁵⁵ Mortgage Interest Rate Survey (MIRS) data reported by the Federal Housing Finance Board separate conventional home purchase loans by their metropolitan and non-metropolitan location. The average non-metropolitan share between 1999 and 2002 was about 13 percent.

⁵⁶ For the 1999-2002 data in Table D.9, the nonmetropolitan adjustment was calculated by multiplying the actual single-family-owner property share during a particular year by that year's underserved area share for non-metropolitan areas by the average metropolitan/non-metropolitan differential of 15 percent (see text). The average differential of 15 percent was used because the annual differentials exhibited rather wide variation, and given issues about HMDA's coverage of nonmetropolitan areas, the average differential was used. An adjustment of 1.5 percentage points was used for the earlier years, 1995 to 1998.

manufactured home loans will increase the share of rental units, which increases the overall underserved areas market share, thus partially offsetting the 0.8 percent reduction. The net effect is probably a reduction of about three-quarters of a percentage point.

The estimates presented in Table D.13 suggest that 30–35 percent would be a reasonable range for the market estimate for underserved areas based on the projection model described earlier and assuming 1990 Census geography. This range incorporates market affordability conditions that are more adverse than have existed recently and it excludes B&C loans from the market estimates. As discussed next, switching from 1990 to 2000 Census geography increases this market range by five percentage points to 35–40 percent.

4. 2000-Based Underserved Area Market Shares

The above analysis has concluded that 30–35 percent would be a reasonable market range for the Geographically Targeted Goal

based on past origination activity in underserved areas and on scenarios that cover a variety of economic and mortgage market conditions. That analysis, which included historical data going back to the early 1990s, necessarily used 1990 Census geography to define underserved census tracts. As explained in Appendix B, HUD will be defining underserved areas based on 2000 Census geography beginning in 2005, the first year covered by this proposed rule. Appendix B also explains that the number of census tracts in metropolitan areas covered by HUD's underserved area definition will increase from 21,587 tracts (based on 1990 Census) to 26,959 tracts (based on 2000 Census and OMB's respecification of metropolitan areas). This increase in the number of tracts defined as underserved means that the market estimate for the Geographically Targeted Goal will be higher than the 30-35 percent estimate presented above. Thus, this section provides a new range of market estimates for underserved areas defined in terms of 2000 Census data.

The 1990-based analysis that produced the 30–35 percent range serves as the starting point for an upward adjustment in the market range.

For the years 1999 to 2002, Table D.14 reports the underserved areas share of the mortgage market for single-family-owner, investor (non-owner), and multifamily properties, with comparisons between 1990based and 2000-based measures of underserved areas. HMDA data, which is the source of the mortgage data, were reported in terms of 1990 census tracts. For the years 1999 to 2002, HUD used various apportionment techniques to re-allocate 1990-based HMDA mortgage data into census tracts as defined by the 2000 Census. The 1990-based underserved area market shares reported in Table D.14 are the same data reported earlier in Table D.12, while the 2000-based underserved area market shares result from re-allocating 1999–2002 HMDA data into 2000 Census geography. In addition, the data are defined in terms of the new OMB metropolitan area definitions.

Table D.14

Underserved Area Share of Mortgage Market in Metropolitan Areas: 1999-2002 HMDA Data 1990 Geography Versus 2000 Geography

Avenatives of Fight parameters of the	merchaliteren Appropriate Control of the Control of		Purc	Purchase					Refir	Refinance					To	Total		
	Con	Conforming Market	ij	Marke	Market W/O B&C Loans	oans	Cor	Conforming Market	ket	Mark	Market W/O B&C Loans	Surro	Coll	Conforming Market	je j	Marke	Market W/O B&C Loans	OaltS
Single-Family -Owner	le-Family -Owner 2000-Based 1990-Based Difference 2000-Based	1990-Based	Difference	2000-Based	1990-Based	rence	2000-Based	1990-Based Difference		2000-Based	1990-Based	Difference	2000-Based 1990-Based		Difference	2000-Based	1990-Based	Difference
0001	1 F	35.8	3.6	702	75.7	3.5	36.0	30.4		14.0		3.5	318		3.6	17.4		3.5
2000	33.0	27.1	\$ 0	32.2	26.4	90	607	35.2	5.7	90	33.2	5.6	36.1	30.3	, v	34.6	28.9	5.7
2001	31.6	25.8	5.8	30.9	25.2	5.7	31.0	25.6	5.4	30.0	24.7	5.3	31.2	25.7	5.5	30.3	24.9	5.4
2002	33.3	27.2	6.1	32.3	26.4	5.9	29.8	24.4	5.4	28.7	23.5	5.2	30.8	25.2	9.6	29.8	24.3	5.5
1999-2002	32.3	26.5	5.8	31.5	25.8	5.7	32.3	26.8	5.5	30.9	25.6	5.3	32.3	26.7	5.6	31.1	25.7	5.4
Non-Owner																		
1999	46.7	41.6	5.1				56.4	51.2	5.2				51.2	46.1	5.1			
2000	48.0	42.6	5.4				61.4	56.8	4.6				52.5	47.4	5.1			
2001	47.1	41.3	5.8				52.0	46.8	5.2				49.7	44.2	5.5			
2002	48.1	42.1	0.9				51.2	45.8	5.4				49.8	44.2	5.6			
1999-2002	47.5						53.6						50.5					
Multifamily																		
1999													57.8	49.7	8.1			
2001													60.7	52.7 55.0	8.0			
1999-2002													0.09					

Source: HMDA data for metropolitan aeas. See text for definition of underserved areas and for the method for excluding B&C loans from the market. The 1999-2002 averages are loan-based weighted averages. The "1990-Based" underserved area shares are based on 2000 census tracts, and new OMB metropolitan area definitions.

¹ A purchase/refinance breakdown is not available for multifamily.

First, consider the market shares for singlefamily-owner properties in the top portion of Table D.14. In 2002, the underserved area percentage for home purchase loans increases from 27.2 percent (1990-based) to 33.3 percent (2000-based), an increase of 6.1 percentage points; the corresponding percentages for refinance loans were 24.4 percent (1990-based) and 29.8 percent (2000based), or an increase of 5.4 percentage points. Considering total owner loans (i.e., both home purchase and refinance owner loans), the average of the "Differences" reported in Table D.14 is 5.6 percentage points for the conforming market. Between 1999 and 2001, 32.3 percent of mortgage originations were originated in underserved areas based on 2000 geography, compared with 26.7 percent based on 1990 geography yielding an overall differential of 5.6 percentage points.

Next, consider the underserved area market shares reported for single-family rental (or non-owner) and multifamily properties in the middle and bottom portions of Table D.14. In 2002, the underserved area percentage for home purchase non-owner loans increases from 42.1 percent (1990-based) to 48.1 percent (2000-based), an increase of 6.0 percentage points; the corresponding percentages for refinance loans were 45.8 percent (1990-based) and 51.2 percent (2000based), or an increase of 5.4 percentage points. Considering total single-family rental loans (i.e., home purchase and refinance loans), the 1999-02 average of the "Differences" reported in Table D.14 is 5.3 percentage points for the single-family rental market. The multifamily differentials are slightly higher at approximately 7-8 percentage points. Between 1999 and 2002, 59.8 percent of multifamily originations (on a dollar basis) were originated in underserved areas based on 2000 geography,

compared with 52.3 percent based on 1990 geography.

The underserved areas shares based on 2000 Census geography were estimated for the last four years, 1999 to 2002; the following estimates were obtained: 39.0 percent (1999), 40.4 percent (2000), 37.7 percent (2001), and 37.2 percent (2002). These 2000-based market estimates are slightly over five percentage points higher than the 1990-based market estimates for underserved areas reported in Table D.9: 5.1 percent (1999), 5.2 percent (2000), 5.1 percent (2001), 5.1 percent (2002), and 5.1 percent (2002).57 This analysis suggests that a reasonable range for the overall market share for underserved areas based on 2000 geography might be 35-40 percent, which is obtained by simply adding five percentage points to the 30-35 percent range estimated earlier based on 1990-based geography. As discussed next, a 35-40 percent range is indeed an appropriate estimate of the underserved area market based on 2000 geography.

Table D.15 reports the results of the projection model assuming 2000 geography. Since Table D.15 has the same interpretation as Table D.13, there is no need to provide a detailed discussion of it.⁵⁸ If the single-

family-owner percentage for underserved areas is at its 1999–2002 HMDA average of 33 percent, the market share estimate is 39 percent. The overall market share for underserved areas peaks at approximately 41 percent when the single-family-owner percentage is at its 2000 level of 36 percent. Most of the estimated market shares for the owner percentages that are within four percentage points of recent experience (*i.e.*, the 29–33 percent range) are in the 36–39 percent range.

BILLING CODE 4210-27-P

only on the HMDA data reported in Table D.14, they would have been 48.0% for Case 1, 46.0% for Case 2, and 50.0% for Case 3. However, in conducting this 2000-based analysis, HUD also computed the single-family rental shares for the GSEs in terms of both the number of mortgages (consistent with the HMDA data in Table D.14) and the number of single-family rental units financed (the concept used in the housing goals calculation). That analysis showed that the unit-based underserved area percentage was approximately six percentage points higher than the number-ofmortgage-based underserved area percentage. To reflect this differential, HUD adjusted the percentages in Cases 1-3 by an additional four percentage points. With respect to multifamily properties, the following assumptions were made with respect to underserved areas shares: 58.0% for Case 1, 56.0% for Case 2, and 59.0% for Case 3. If these percentages were based only on the HMDA data reported in Table D.14, they would have been 55.0% for Case 1, 53.0% for Case 2, and 55.0% for Case 3. HUD computed the multifamily underserved area shares for the GSEs in terms of mortgage dollars (consistent with the HMDA data Table D.14) and the number of multifamily rental units financed (the concept used in the housing goals calculation). That analysis showed that the unit-based underserved area percentage was also approximately six percentage points higher than the mortgage-dollar-based underserved area percentage; thus HUD adjusted the percentages upward.

⁵⁷ The differentials reported in Table D.14 for the three individual property types tend to be greater than 5.5 percentage points, which raises the question of why the overall differential is only 5.1 percentage points. As explained later, the upward adjustment to account for underserved areas in nonmetropolitan areas is about 0.65 percentage point less using the 2000-based Census data than it was using the 1990-based Census data.

⁵⁸ In addition to adjusting the various single-family-owner parameters upward, the following 2000-based assumptions were made with respect to the underserved areas shares of single-family rental properties: 52.0% for Case 1, 50.0% for Case 2, and 54.0% for Case 3. If these percentages were based

Table D.15

Underserved Area Market Estimates For Sensitivity Analysis

2000 Census Geography

Multifamily Mix (Percent) Case 1 with Different Underserved Areas Percentages for Single-Family 13.5% 15% 16.5% Owner-Occupied's: Single-Family Owner-Occupied: a 36% 41.1 % 41.4 % 41.7 % 35% 40.3 40.6 41.0 34% 39.9 39.5 40.2 33% 38.7 39.1 39.5 32% 37.9 38.3 38.7 31% 37.2 37.6 37.9 30% 36.4 36.8 37.2 29% 35.6 36.0 36.4 28% 34.8 35.3 35.7 27% 34.0 34.0 34.9 26% 33.2 33.7 34.2 Single-Family Owner-Occupied: 31% with: 37.2 % 37.6 % 37.9 % Case 1 (above) 36.2 36.5 36.9 Case 2 38.3 38.7 39.1 Case 3 Single-Family Owner-Occupied: 28% with: 34.8 % 35.3 % 35.7 % Case 1 (above)

Case 2

Case 3

33.7

36.0

34.1

36.5

34.6

36.9

^a These percentages are assumed to be the overall (both home purchase and refinance) percentages of single-family owner mortgages in underserved census tracts.

Following the 1990-based analysis in Section G.2, additional sensitivity analyses were conducted to reflect the volatility of the economy and mortgage market. Recession and high interest rate scenarios assumed a significant drop in the underserved area percentage for single-family-owner mortgages. The single-family-owner percentage can go as low as 29 percentwhich is 3 percentage points lower than the 1994-2002 average of 32 percent and 4 percentage points lower than the 1999-2002 average of 33 percent—and the estimated market share for underserved areas remains about 36 percent. In a more severe case, the overall underserved market share would be 33-34 percent if the single-family-owner share fell to 26 percent (its 1992 level), which is 7 percentage points lower than its 1999-2002 average. In the heavy refinance scenarios (with their lower multifamily mixes), the underserved areas market share was typically around 36-37 percent.

Non-metropolitan Areas. As explained in Section G.3, in order to account for the much larger coverage of underserved areas in nonmetropolitan areas, 1.25 percent was added to the market share based on metropolitan area data, in order to arrive at a nationwide estimate of the market share for underserved areas. According to HMDA, underserved counties accounted for 42.7 percent of singlefamily-owner mortgages originated in nonmetropolitan areas during the 1999-to-2002 period, based on 1990 geography. With 2000 geography and the new tract-based definition of underserved areas in non-metropolitan areas, the market share falls by 2.3 percentage points to 39.6 percent. This 2000-based underserved areas percentage of 39.6 percent for non-metropolitan areas is about eight percentage points less than the comparable percentage for metropolitan areas.59 This eight-point differential is lower than the 15point differential used in the earlier 1990based Census analysis. Assuming that nonmetropolitan areas account for 13 percent of all single-family-owner mortgages and estimating that the single-family-owner market accounts for 72 percent of newlymortgaged dwelling units, then the nonmetropolitan underserved area differential of 8 percent would raise the overall market estimate by 0.75 percentage point-8 percentage points times 0.13 (nonmetropolitan area mortgage market share) times 0.72 (single-family owner mortgage market share). Based on this calculation, if

the 8 point differential reflected actual market conditions, then the underserved areas market share estimated using metropolitan area data should be increased by 0.75 percentage point to account for the effects of underserved counties in nonmetropolitan areas, based on 2000 geography. A more conservative adjustment of 0.65 percentage points was made in Table D.15, which reports the results of the projection model.

Section G.3 reported that excluding manufactured housing loans (as well as small loans less than \$15,000) reduced the overall underserved area market estimates based on 1990 geography by less than one percentage point. Excluding manufactured housing loans leads to a similar reduction for the market estimates based on 2000 geography.

The estimates presented in Table D.15 suggest that 35–40 percent is a reasonable range for the market estimate for underserved areas based on the projection model described earlier. This range incorporates market affordability conditions that are more adverse than have existed recently and it excludes B&C loans from the market estimates.

5. Conclusions

Based on the above findings as well as numerous sensitivity analyses, HUD concludes that 35-40 percent is a reasonable estimate of mortgage market originations that would qualify toward achievement of the Geographically Targeted Goal if purchased by a GSE. The 35-40 percent range is higher than the market range in the 2000 Rule mainly because it is based on 2000 Census geography which includes more underserved census tracts than 1990 Census geography. HUD recognizes that shifts in economic and housing market conditions could affect the size of this market; however, the market estimate allows for the possibility that adverse economic conditions can make housing less affordable than it has been in the last few years. In addition, the market estimate incorporates a range of assumptions about the size of the multifamily market and excludes B&C loans.

H. Size of the Conventional Conforming Market for the Special Affordable Housing

This section presents estimates of the conventional conforming mortgage market for the Special Affordable Housing Goal. The special affordable market consists of owner and rental dwelling units which are occupied by, or affordable to: (a) Very-low-income families; or (b) low-income families in low-income census tracts; or (c) low-income families in multifamily projects that meet minimum income thresholds patterned on the low-income housing tax credit (LIHTC).

HUD estimates that the special affordable market is 24–28 percent of the conventional conforming market.

HUD is proposing to establish each GSE's special affordable multifamily subgoal as 1.0 percent of its average annual dollar volume of total (single-family and multifamily) mortgage purchases over the 2000–2002 period. In dollar terms, the Department's proposal is \$5.49 billion per year in special affordable multifamily purchases for Fannie Mae, and \$3.92 billion for Freddie Mac. The multifamily special affordable goal, as well as the special affordable home purchase subgoal, are discussed further in Appendix C.

Section F described HUD's methodology for estimating the size of the low- and moderate-income market. Essentially the same methodology is employed here except that the focus is on the very-low-income market (0-60 percent of Area Median Income) and that portion of the low-income market (60-80 percent of Area Median Income) that is located in low-income census tracts. Data are not available to estimate the number of renters with incomes between 60 and 80 percent of Area Median Income who live in projects that meet the tax credit thresholds. Thus, this part of the Special Affordable Housing Goal is not included in the market estimate.

1. Special Affordable Shares by Property Type

The basic approach involves estimating for each property type the share of dwelling units financed by mortgages that are occupied by very-low-income families or by low-income families living in low-income areas. HUD combined mortgage information from HMDA, the American Housing Survey, and the Property Owners and Managers Survey in order to estimate these special affordable shares.

a. Special Affordable Owner Percentages

HMDA data for the percentage of singlefamily-owners that qualify for the Special Affordable Goal are reported in Table D.16. That table also reports data for the two components of the Special Affordable Goal very-low-income borrowers and low-income borrowers living in low-income census tracts. Focusing first on home purchase loans, HMDA data show that the special affordable share of the market has followed a pattern similar to that discussed earlier for the lowand moderate-income loans. The percentage of special affordable borrowers increased significantly between 1992 and 1994, from 10.4 percent of the conforming market to 12.6 percent in 1993, and then to 14.1 percent in 1994. Between 1995 and 1998, the special affordable market was in the 14-16 percent range, averaging 15.1 percent. Over the past four years (1999-2002), the special affordable share of the home purchase loans has averaged 16.7 percent.

BILLING CODE 4210-27-P

⁵⁹ Between 1999 and 2002, 2000-based underserved census tracts accounted for 31.4 percent (unweighted annual average) of all mortgages in metropolitan areas. This 1999–02 average percentage for metropolitan areas is lower that the 33.0 percent reported in previous paragraphs. To be comparable with the nonmetropolitan data, these metropolitan area data do not include loans originated by lenders that specialize in manufactured housing loans and B&C loans; excluding these loans lowers the underserved areas share.

⁶⁰There are two LIHTC thresholds: at least 20 percent of the units are affordable at 50 percent of AMI or at least 40 percent of the units are affordable at 60 percent of AMI.

Table D.16

Special Affordable Share of
Single-Family-Owner Mortgage Market: 1992-2002 HMDA Data

	Home Purchase		Refinance		Total	
	Conforming Market	Market W/O B&C Loans	Conforming Market	Market W/O B&C Loans	Conforming Market	Market W/O B&C Loans
1. Very-Low-Income				William Committee of the Committee of th		
1992	8.7 %	8.7 %	4.5 %	4.4 %	5.8 %	5.8 %
1993	10.8	10.8	5.8	5.7	7.3	7.2
1994	11.9	11.9	0.11	10.6	11.5	11.3
1995	12.0	12.0	12.3	11.7	12.1	11.9
1996	12.7	12.7	13.0	12.2	12.8	12.5
1997	13.0	13.0	14.5	13.4	13.7	13.2
1998	13.3	13.2	11.3	10.4	12.1	11.4
1999	15.0	14.7	16.2	14.8	15.6	14.8
2000	14.7	14.4	19.0	17.6	16.3	15.6
2001	13.6	13.5	12.3	11.7	12.7	12.3
2002	14.1	14.0	12.5	12.0	12.9	12.6
2. Low Income in Low Income Areas						
1992	1.7 %	1.7 %	1.1 %	1.1 %	1.3 %	1.3 %
1993	1.8	1.8	1.2	1.2	1.4	1.4
1994	2.2	2.2	2.3	2.2	2.3	2.2
1995	2.4	2.4	2.7	2.5	2.5	2.4
1996	2.3	2.3	2.6	2.4	2.4	2.3
1997	2.3	2.3	3.0	2.7	2.6	2.5
1998	2.2	2.2	2.2	1.9	2.2	2.0
1999	2.3	2.3	3.0	2.7	2.7	2.5
2000	2.5	2.4	3.7	3.3	2.9	2.7
2001	2.2	2.2	2.2	2.1	2.2	2.1
2002	2.3	2.3	2.1	2.0	2.2	2.0
3. Special Affordable (1 plus 2)						
1992	10.4 %	10.4 %	5.5 %	5.5 %	7.1 %	7.1 %
1993	12.6	12.6	7.0	6.9	8.6	8.6
1994	14.1	14.1	13.2	12.8	13.7	13.5
1995	14.4	14.4	14.9	14.2	14.6	14.3
1 99 6	15.0	15.0	15.6	14.6	15.3	14.8
1997	15.3	15.2	17.6	16.1	16.4	15.6
1998	15.5	15.4	13.5	12.3	14.2	13.5
1999	17.3	17.0	19.2	17.5	18.3	17.3
2000	17.1	16.8	22.7	20.9	19.3	18.3
2001	15.8	15.6	14.6	13.8	15.0	14.5
2002	16.4	16.3	14.6	14.0	15.1	14.6

Source: HMDA data in metropolitan areas. See text for the method for excluding B&C loans from the market.

Considering all (home purchase and refinance) loans during recent "home purchase" environments, the special affordable share averaged 18.8 percent during 1999-2000, over three percentage points more than the 15.4 percent average between 1995 and 1997. Excluding B&C (all subprime) loans from the analysis reduces this differential only slightly to 2.7 (2.4) percentage points. As mentioned earlier. lending patterns could change with sharp changes in the economy, but the fact that there have been several years of strong affordable lending suggests that the special affordable market has changed in fundamental ways from the mortgage market of the early 1990s. In fact, there appears to have been a slight increase in this market recently, at least during 1999 and 2000.

Except for the three years of heavy refinancing (1998, 2001, and 2002), the special affordable share of the refinance market has recently been higher than the special affordable share of the home purchase market—a pattern discussed in Section F for low-mod and very-low-income loans. During 1999 (2000), for example, the special affordable share of the refinance market was 19.2 (22.7) percent, compared with 17.3 (17.1) percent for the home loan market. The higher special affordable percentages for refinance loans are reduced or even eliminated if subprime loans are excluded from the analysis. As shown in Table D.16, excluding B&C loans from the data practically eliminates the refinance-homepurchase differential for 1999 and reduces the differential for 2000 to 4.1 percentage points (from 5.6 percentage points). Going further and excluding A-minus loans from the year 2000 data would reduce the differential to 2.1 percentage points. HUD's projection model excludes B&C loans and sensitivity analyses will show the effects on the overall special affordable market of excluding all single-family subprime loans.

b. Very-Low-Income Rental Percentages

Table D.14 in Appendix D of the 2000 Rule reported the percentages of the single-family rental and multifamily stock affordable to very-low-income families. According to the AHS, 59 percent of single-family units and 53 percent of multifamily units were affordable to very-low-income families in 1997. The corresponding average values for the AHS's six surveys between 1985 and 1997 were 58 percent and 47 percent, respectively. As discussed earlier in Section F, an important issue concerns whether rent data based on the existing rental stock from the AHS can be used to proxy rents of newly mortgaged rental units. HUD's analysis of POMS data during the 2000 rule-making process suggested that it could-estimates from POMS of the rent affordability of newly-

mortgaged rental properties are quite consistent with the AHS data on the affordability of the rental stock. Fifty-six (56) percent of single-family rental properties with new mortgages between 1993 and 1995 were affordable to very-low-income families, as was 51 percent of newly-mortgaged multifamily properties. These percentages for newly-mortgaged properties from the POMS are similar to those reported above from the AHS for the rental stock. The baseline projection from HUD's market share model assumes that 50 percent of newly-mortgaged, single-family rental units, and 47 percent of multifamily units, are affordable to very-lowincome families.

c. Low-Income Renters in Low-Income Areas

HMDA does not provide data on lowincome renters living in low-income census tracts. As a substitute, HUD used the POMS and AHS data. As explained in the 2000 GSE Rule, the share of single-family and multifamily rental units affordable to lowincome renters at 60-80 percent of area median income (AMI) and located in lowincome tracts was calculated using the internal Census Bureau AHS and POMS data files. 61 The POMS data showed that 8.3 percent of the 1995, single-family rental stock, and 9.3 percent of single-family rental units receiving financing between 1993 and 1995, were affordable at the 60-80 percent level and were located in low-income census tracts. The POMS data also showed that 12.4 percent of the 1995 multifamily stock, and 13.5 percent of the multifamily units receiving financing between 1993 and 1995, were affordable at the 60-80 percent level and located in low-income census tracts.62 The baseline analysis below assumes that 8 percent of the single-family rental units and 11.0 percent of multifamily units are

affordable at 60–80 percent of AMI and located in low-income areas. 63

2. Size of the Special Affordable Market

During the 2000 rule making, HUD estimated a market share for the Special Affordable Goal of 23-26 percent. This estimate was below market experience, as the special affordable market accounted for 26-30 percent of all housing units financed between 1999 and 2002, as well as 26-29 percent of units financed between 1995 and 1998 (see Table D.9). This underestimation was mainly due to the assumption in the projection model that the special affordable share of refinance loans was lower than the special affordable share of home purchase loans; and the fact that the special affordable share of the single-family-owner market increased recently (see above discussion). This section produces new estimates of the special affordable market.

The size of the special affordable market depends in large part on the size of the multifamily market and on the special affordable percentages of both owners and renters. Table D.10 gives new market estimates for different combinations of these factors. As before, Case 2 is slightly more conservative than the baseline projections (Case 1) mentioned above. For instance, Case 2 assumes that only 6 percent of rental units are affordable to low-income renters living in low-income areas.

Table D.17 assumes a refinance rate of 35 percent, which means that the table reflects home purchase or low-refinancing environments. After presenting these results, market estimates reflecting a heavy refinance environment will be presented. In the 2000 GSE Rule, HUD assumed that the special affordable share of refinance loans was 1.4 percentage points lower than the special affordable share of borrowers purchasing a home. However, as discussed earlier, the special affordable share of refinance loans equaled or was greater than the special affordable share of home purchase loans during home purchase environments such as 1995–97 or 1999–2000; thus, the assumption of a lower special affordable shares for refinance loans is initially dropped from the analysis but will be reintroduced during the sensitivity analysis and the discussion of heavy refinancing environments.

BILLING CODE 4210-27-P

⁶¹ Affordability was calculated as discussed earlier in Section F, using AHS monthly housing cost, monthly rent, number of bedrooms, and MSA location fields. Low-income tracts were identified using the income characteristics of census tracts from the 1990 Census of Population, and the census tract field on the AHS file was used to assign units in the AHS survey to low-income tracts and other tracts. POMS data on year of mortgage origination were utilized to restrict the sample to properties mortgaged during 1993–1995.

⁶² During the 1995 rule-making process, HUD examined the rental housing stock located in low-income zones of 41 metropolitan areas surveyed as part of the AHS between 1989 and 1993. While the low-income zones did not exactly coincide with low-income tracts, they were the only proxy readily available to HUD at that time. Slightly over 13 percent of single-family rental units were both affordable at the 60–80 percent of AMI level and located in low-income zones; almost 16 percent of multifamily units fell into this category.

⁶³ Therefore, combining the assumed very-low-income percentage of 50 percent (47 percent) for single-family rental (multifamily) units with the assumed low-income-in-low-income-area percentage of 8 percent (11 percent) for single-family rental (multifamily) units yields the special affordable percentage of 58 percent (58 percent) for single-family rental (multifamily) units. This is the baseline Case 1 in Table D.10.

Table D.17

Special Affordable Market Estimates Sensitivity Analysis

	Multifa	mily Mix (Perc	ent)
Case 1 With:	13.5%	15%	16.5%
(a) Rent Affordable at 60% AMI: Single-Family Rent Percentages= 50%, Multifmaily= 47%			
(b) Low-Income in Low-Income Areas= 8% for Single-Family Rental and 11% for Multifamily			
(c) Single-Family Owner-Occupied's			
Special Affordable Share: *			
19.0%	29.4 %	30.0 %	30.5
18.0%	28.7	29.2	29.7
17.0%	27.9	28.4	29.0
16.0%	27.1	27.7	28.2
15.0%	26.3	26.9	27.5
14.0%	25.5	26.1	26.7
13.0%	24.8	25.4	26.0
12.0%	24.0	24.6	25.2
11.0%	23.2	23.8	24.5
10.0%	22.4	23.1	23.7
9.0%	21.6	22.3	23.0
Case 2 With:			
(a) Rent Affordable at 60% AMI: Single-Family			
Rent Percentages= 47%, Multifamily= 44%			
(b) Low-Income in Low-Income Areas= 6% for Single-Family Rental and 10% for Multifamily			
(c) Single-Family Owner-Occupied's			
Special Affordable Share:			
16.0%	25.8 %	26.3 %	26.9
15.0%	25.0	25.6	26.1
14.0%	24.3	24.8	25.4
13.0%	23.5	24.0	24.6
12.0%	22.7	23.3	23.9
11.0%	21.9	22.5	23.1
10.0%	21.1	21.7	22.4
Case 3 With:			
(a) Rent Affordable at 60% AMI: Single-Family			
Rent Percentage= 53%, Multifamily= 50%			
(b) Low-Income in Low-Income Areas= 8% for			
Single-Family Rental and 12% for Multifamily			
(c) Single-Family Owner-Occupied's			
Special Affordable Share:			
16.0%	28.4 %	29.0 %	29.7
15.0%	27.6	28.3	28.9
14.0%	26.9	27.5	28.2
13.0%	26.1	26.8	27.4
12.0%	25.3	26.0	26.7
11.0%	24.6	25.2	25.9

^a See text for interpretation of single-family-owner percentages.

As shown in Table D.17, the market estimates are: 28-29 percent if the owner percentage is 17 percent (home purchase share for 1999 and 2000); 27-28 percent if the owner percentage is 16 percent (home purchase share for 1998, 2001, and 2002); and 26-27 percent if the owner percentage is 15 percent (home purchase average from 1995-97). If the special affordable percentage for home purchase loans fell to 12 percent or by four percentage points below its 1995-2002 average level of 16 percent "then the overall market estimate would be about 25 percent. Thus, 25 percent is consistent with a rather significant decline in the special affordable share of the single-family home purchase market. A 25 percent market estimate allows for the possibility that adverse economic and housing affordability conditions could keep special affordable families out of the housing market. On the other hand, if the special affordable home purchase percentage stays at its recent levels (15–17 percent), the market estimate is in the 27-29 percent range.

Heavy Refinancing Environments. The special affordable share of the overall market declines when refinances dominate the market. Section F.3b, which presents the low-mod market estimates, explained the assumptions for incorporating a refinance environment into the basic projection model for 2005-08. Briefly, they are: (1) the refinance share of single-family mortgages was increased to 65 percent (from 35 percent); the market share for subprime loans reduced to 8.5 percent (from 12 percent); and the multifamily mix was initially assumed to be 13.5 percent (instead of 15 percent or 16.5 percent, which characterize a home purchase environment). The special affordable share for refinance loans was assumed to be 13 percent, or two percentage points below the assumed special affordable share of home purchase loans (which was set at 15 percent, slightly below the 1998, 2001, and 2002 level of 16 percent). Under these assumptions, the special affordable market share (excluding B&C loans) was projected to be 25.4 percent. If the multifamily mix is reduced further to 11 (9) percent, the market projection falls to 24.4 (23.6) percent. If the single-family special affordable percentages are reduced to 14 percent (home purchase) and 12 percent (refinance), and the multifamily mix is 11 (9) percent, the overall low-mod market share falls 23.6 (22.8) percent. As noted in the discussion of the low-mod market, refinance environments are characterized by low interest rates; therefore, it is unlikely that the special affordable share of the home purchase market would fall below 14 percent during heavy refinance environments, given that it has averaged almost 16 percent over the past seven years. In addition to these projections, a refinance environment characterized by the year 2002 market was used to examine how the special affordable market changed under heavy refinancing conditions. Lowering the multifamily mix in the heavy refinance model characterized by year 2002 assumptions produced the following range of estimates for the overall special affordable market: 25.8 percent (multifamily mix of 11.0 percent) to 24.7 percent (multifamily mix of

8 percent) to 23.9 percent (multifamily mix of 6 percent). 64

The various market estimates presented in Table D.17 for a home purchase environment and reported above for a refinance environment are not all equally likely. Most of them equal or exceed 25 percent. In the home purchase environment, estimates below 25 percent would require the special affordable share for home purchase loans to drop to 12-13 percent which would be 3-4 percentage points lower than the 1995-2002 average for the special affordable share of the home purchase market. Dropping below 25 percent would be more likely in a heavy refinance environment, as the actual estimated market shares during 1998, 2001, and 2002 were approximately 26 percent. However, sensitivity analyses of a refinance environment showed that a 24 percent special affordable market share was consistent with market assumptions significantly more adverse than the heavy refinance years of 1998, 2001, and 2002.

Additional Sensitivity Analyses. Additional sensitivity analyses were conducted around the results reported in Table D.17, which reflects a home purchase environment. Assuming that the special affordable share of the home loan market is 16 percent, reducing the multifamily mix from its baseline of 15 percent to 13.5 (12) percent would reduce the overall special affordable market share from 27.7 percent to 27.1 (26.4) percent. In this case, increasing the multifamily mix from 15 percent to 16.5 percent would increase the special affordable market share from 27.7 percent to 28.2 percent.

As shown in Table D.17, the market estimates under the more conservative Case 2 projections are one to one-and-a-half percentage points below those under the Case 1 projections. This is due mainly to Case 2's lower share of single-family investor mortgages (8 percent versus 10 percent in Case 1) and its lower affordability and low-income-area percentages for rental housing (e.g., 53 percent for single-family rental units in Case 2 versus 58 percent in Case 1).

Recent years have been characterized by record low interest rates and strong housing affordability conditions. Therefore, it was important for HUD to examine potential changes in the market shares under more adverse market affordability environments than have existed recently, as well as under heavy refinance environments. A heavy refinance environment has already been discussed so this section focuses on recession and high-interest-rate scenarios. In the recession scenario defined earlier in the lowmod analysis (see Section F.3a), the special affordable share of the home purchase market was reduced to 12 (10) percent, or 4 (6) percentage points lower than its 1995-2002 average share of 16 percent. Under these

rather severe conditions, the overall market share for the Special Affordable Goal would decline to 25.1 (23.6) percent, assuming a multifamily mix of 16.5 percent. A significant increase in interest rates would also make it more difficult for lower income families to afford homeownership and qualify for mortgages, thus reducing the special affordable share of the market. But as noted above, the special affordable share of the home purchase market could fall to 10 percent "almost forty percent below its seven-year average of 16 percent" before the market share for the Special Affordable Goal would fall below 24 percent.

B&C Loans. The procedure for dropping B&C loans from the projections is the same as described in Section F.3.b for the Lowand Moderate-Income Goal. The special affordable percentage for B&C loans is 28.0 percent, which is similar to the projected percentages for the overall market given in Table D.17. Thus, dropping B&C loans (as well as all subprime loans) does not appreciably reduce the overall market estimates. Consider the case of a singlefamily-owner percentage of 15 percent, which yields an overall market estimate for Special Affordable Goal of 27.0 percent if B&C loans are included in the analysis. Dropping B&C loans from the projection model reduces the special affordable market share by 0.1 percentage points to 26.9, as reported in Table D.15. Dropping all subprime loans (A-minus as well as B&C) would reduce the special affordable market projection to 26.8 percent.

Manufactured Housing Loans. Excluding manufactured housing loans (as well as small loans less than \$15,000) reduces the overall market estimates reported in Table D.17 by about one percentage point or less. This is estimated as follows. First, excluding these loans reduces the unadjusted special affordable percentage for single-family-owner mortgages in metropolitan areas by about 1.5 percentage points, based on analysis of recent home purchase environments (1995-97 and 1999 and 2000). Multiplying this 1.5 percentage point differential by the property share of single-family-owner units (72.2 percent) yields 1.1 percentage points, which serves as a proxy for the reduction in the overall special affordable market share due to dropping manufactured home loans from the market analysis. The actual reduction will be somewhat less because dropping manufactured home loans will increase the share of rental units, which increases the overall special affordable market share, thus partially offsetting the 1.1 percent reduction. The net effect is probably a reduction of slightly less than one percentage point.

Tax Credit Definition. Data are not available to measure the increase in market share associated with including low-income units located in multifamily buildings that meet threshold standards for the low-income housing tax credit. Currently, the effect on GSE performance under the Special Affordable Housing Goal is rather small. For instance, adding the tax credit condition increased Fannie Mae's performance as follows: 0.42 percentage point in 1999 (from 17.20 to 17.62 percent); 0.59 percentage point in 2000 (from 18.64 to 19.23 percent); and

⁶⁴ During 2002, the special affordable share was 15.8 percent for home purchase loans and 14.6 percent for refinance loans, yielding a differential of 1.2 percentage points. Increasing the differential to 2 percentage points (by reducing the special affordable share of refinance loans to 13.8 percent) would reduce the overall special affordable market percentages reported in the text by about 0.4 percentage point.

0.43 percent point in 2001 (from 19.29 to 19.72 percent). The increases for Freddie Mac have been lower (ranging from 0.24 to 0.38 percentage point during the same period).

New 2000-Based Census Geography and New OMB Metropolitan Area Definitions. Going forward, ĤUD will be re-benchmarking its median incomes for metropolitan areas and non-metropolitan counties based on 2000 Census incomes, will be defining lowincome census tracts (which are included in the definition of special affordable) in terms of the 2000 Census geography, and will be incorporating the effects of the new OMB metropolitan area definitions. HUD projected the effects of these three changes on the special affordable shares of the market for the years 1999–2002. Under the historical data, the average special affordable share of the conventional conforming market was 16.7 (16.9) percent for home purchase (total) loans (see Table D.16); the corresponding average with the projected data was 16.6 (16.9) percent. For home purchase loans in the conventional conforming market, the projected special affordable percentages for each year between 1999 and 2002 were as follows (with the historical data from Table

D.16 in parentheses): 17.5 (17.3) percent for 1999; 17.4 (17.1) percent for 2000; 15.6 (15.8) percent for 2001; and 15.8 (16.4) percent for 2002. While the projected percentages are lower in 2001 (0.2 percentage point) and 2002 (0.6 percentage point), they are higher in 1999 (0.2 percentage point) and 2000 (0.3 percentage point). Given these small differences there is no need to changes the market estimates discussed above.⁶⁵

 $^{65}\,\mathrm{For}$ the other two property types (single-family rental and multifamily), comparisons between projected and historical special affordable percentages were made using the GSEs' data. For single-family rental mortgages, the unweighted average of Fannie Mae's (Freddie Mac's) special affordable percentage for the years 1999 to 2002 was 50.2 (51.4) percent using the projected data, compared with 48.0 (49.4) percent using the historical data. For multifamily mortgages, the unweighted average of Fannie Mae's (Freddie Mac's) special affordable percentage for the years 1999 to 2002 was 50.4 (45.1) percent using the projected data, compared with 53.6 (49.4) percent using the historical data. These comparisons suggest little difference between the projected and historical special affordable shares for rental properties. HUD also projected the overall special affordable percentage for each GSE. For the overall

3. Conclusions

Sensitivity analyses were conducted for the market shares of each property type, for the very-low-income shares of each property type, and for various assumptions in the market projection model. These analyses suggest that 24–28 percent is a reasonable estimate of the size of the conventional conforming market for the Special Affordable Housing Goal. This estimate excludes B&C loans and allows for the possibility that homeownership will not remain as affordable as it has over the past five years. In addition, the estimate covers a range of projections about the size of the multifamily market.

[FR Doc. 04–9352 Filed 4–30–04; 8:45 am] BILLING CODE 4210–27–P

special affordable goal (considering all three property types), the unweighted average of Fannie Mae's (Freddie Mac's) special affordable percentage for the years 1999 to 2002 was 20.0 (18.9) percent using the projected data, compared with 20.0 (18.9) percent using the historical data. There is little difference in the GSEs' average special affordable performance between the projected and historical data.