CHAPTER III

THE HOUSING GOALS AND ALTERNATIVES CONSIDERED

This chapter presents the core of HUD's regulatory analysis as required by OMB Circular A-4 (September 17, 2003), based on projections of the impacts of HUD's rule relative to impacts of less stringent and more stringent alternatives. Section A discusses HUD's approach to fulfilling the requirements of the Circular for analysis of benefits and costs of the regulation. Section B summarizes HUD's regulation regarding the housing goals and home purchase subgoals and describes the alternatives against which it is compared. Section C discusses projected effects of implementation of the regulation in several categories of impacts. Sections D and E compare the projections from section C with projected impacts under two regulatory alternatives, namely, (in section D) establishing the goals and subgoals at higher levels than HUD is proposing, and (in section E) retaining the current levels of the Housing Goals and not introducing subgoals for GSE purchases of home purchase mortgages. Section F discusses elements of HUD's regulatory proposals beyond the levels of the goals and establishment of subgoals.

This chapter relies heavily on material developed in Chapters IV-VI of this Regulatory Analysis and in Appendices A-D of the GSE Rule and includes references to that material where readers can find background information and more detailed discussions of certain issues.

Additional Purchase Analysis. While this chapter covers a wide range of topics, one of the most important concerns the additional goals-qualifying loans that the GSEs will have to purchase in order to meet the new housing goal and subgoal targets. This topic is covered in some detail in Section C.4 below. Due to the importance of this topic, Section A.4 below summarizes that analysis, in case readers are not interested in the detailed discussion.

A. Approach

This section first discusses the Government-Sponsored Enterprise status of Fannie Mae and Freddie Mac and the statutory context for HUD's final rule. With this background, the relevant concepts of costs and benefits applicable to establishing affordable housing goals for the housing GSEs, both of which raise unique conceptual issues, are then discussed. The third subsection sketches the alternatives to HUD's regulation which are considered in this Regulatory Analysis.

A.1. The GSEs' Agency Status and the Need for This Regulatory Action

In establishing housing goals for the GSEs in 1995 and 2000 and in the present rulemaking process, HUD is acting within a statutorily established framework of regulatory relationship between the Federal Government and the two GSEs, Fannie Mae and Freddie Mac. In granting Federal charters to the GSEs, and in various related legislative initiatives, Congress established a series of business advantages for the GSEs which are not available to other business enterprises. These include, among others—

Investment status of GSE-issued debt securities and mortgage-backed securities similar to that of U.S. Treasury debt, in terms of eligibility to be purchased and held by various categories of financial institutions.

Exemption from State "Blue-sky" laws and from debt and equity securities registration requirements of the Securities and Exchange Commission (although Fannie Mae has voluntarily registered its equity securities and Freddie Mac has announced its intention to do so)

Favorable risk weights in risk-based capital requirements of depository institutions

Exemption from State and local taxes, except for property taxes

A $2.25 billion line of credit with the Federal government (exercisable at the discretion of the Secretary of the Treasury)[1]

The effect of these statutorily based advantages, taken together with the statutory obligations imposed on the GSEs relating to their housing mission, is to make purchasers of the GSEs' debt and mortgage-backed securities willing to accept a lower risk-adjusted rate of return than purchasers of securities of other business enterprises which lack such statutorily-based advantages and obligations. In benefit-cost terms, the lower borrowing rate is a *benefit* which the GSEs and their stockholders enjoy. It has, however, an associated *cost*, namely, the value of the risk that taxpayers might find it necessary in some future situation to bear costs associated with the inability of one or both GSEs to fulfill their financial obligations associated with the securities that they issue. It is important to note that the GSEs' securities are required by law to bear a disclaimer of any such obligation on the part of the Federal Government to step in, in such a situation. However, investors evaluate the risk that they bear in holding GSE securities as less than the risk associated with securities of other enterprises having similar institutional risk characteristics as the GSEs. This implies that investors believe that there is at least a possibility that the Federal Government would intervene in the event of a future GSE financial problem.

[1] There are several others. See HUD, *Privatization of Fannie Mae and Freddie Mac: Desirability and Feasibility*, 1996, pp. 26-29.

Published studies have estimated the value of the costs implicitly borne by taxpayers. For example, the Congressional Budget Office (CBO) estimated the funding advantage for the year 2000 to be $10.6 billion annually for both GSEs.[2] CBO terms this value a "subsidy" even though it does not take the form of cash payments from the Government. In recent testimony a CBO representative stated that the subsidy has increased since this estimate was prepared.[3]

Fannie Mae and Freddie Mac "are legislatively chartered for public purposes."[4] Specifically, they are expected "to assist in the financing of affordable housing"[5] both for low- and moderate-income families and in underserved geographical areas. In effect, in exchange for the benefits which they are granted, they are statutorily obligated to undertake activities which have *costs* associated with them. These obligations are summarized in the legislation in the form of four statutory public purposes:[6]

(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 related 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;

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

Among the important effects of this statutory framework is reduction in mortgage interest rates. Estimates of the effect have generally been based on comparison between interest rates below the conforming loan limit—i.e., in the range of loan amounts within which Fannie Mae and Freddie Mac are able to purchase mortgages—and interest rates in

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[2] *Federal Housing Subsidies and the GSEs*, May 2001. See also *Assessing the Public Costs and Benefits of Fannie Mae and Freddie Mac*, May 1996, chapter 2. See below for discussion of CBO's analysis and other related analysis.

[3] "Regulation of the Housing Government-Sponsored Enterprises," Statement of Douglas Holtz-Eakin before the Committee on Banking, Housing, and Urban Affairs, United States Senate, October 23, 2003.

[4] Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Report 102-282 (1992), p. 9.

[5] Ibid., p. 27.

[6] 12 U.S.C. 1716 for Fannie Mae and 12 U.S.C. 1451 note for Freddie Mac, as amended by the Housing and Community Development Act of 1992, secs. 1381(a) and 1382(a), respectively.

the “jumbo” sector. The effect has been estimated to be in the range of 25 to 40 basis points.[7]

FHEFSSA[8] assigned to the Secretary of Housing and Urban Development the responsibility to establish percentage-of-business goals for the GSEs’ purchases of mortgages on housing for low- and moderate-income families, special affordable housing (i.e., housing for very-low-income families and low-income families in low-income areas) and housing in geographically underserved areas, which were initially defined by FHEFSSA as central cities, but beginning in 1996 were defined as determined by the HUD Secretary. The Secretary’s specification of the goals was to be based on consideration of statutorily specified factors for consideration, as follows:

(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 GSE 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.

After the enactment of FHEFSSA the Secretary established interim goals based on requirements in FHEFSSA in 1993, a first set of goals based on full consideration of the statutory factors for consideration in 1995 (effective January 1, 1996), and revised goals in 2000 (effective January 1, 2001). In 1995 and 2000, as well as in the present final rule, the establishment of goals has been based on a review of GSE performance and projection of market ratios for a three- or four-year period into the future. The present rulemaking thus represents the product of a reconsideration of the goals which HUD undertakes periodically. An added factor is the recent issuance of data from the 2000 censuses of population and housing. Changes in levels and patterns of area median incomes and minority concentrations between 1990 and 2000 necessitate substantial re-calibration of the Underserved Areas Housing Goal and modest re-calibration of the Special Affordable Housing Goal. However, as explained in HUD’s regulation and in this Regulatory Analysis, HUD believes that it is also appropriate to raise the levels of the goals and introduce a new system of home purchase subgoals related to the three 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.

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[7] Robert Cotterman and James Pearce, “The Effects of the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation on Conventional Fixed-Rate Mortgage Yields,” in *Studies on Privatizing Fannie Mae and Freddie Mac*, U.S. Department of Housing and Urban Development, 1996.

[8] The Federal Housing Enterprises Financial Safety and Soundness Act, Title XIII of the Housing and Community Development Act of 1992, approved October 28, 1992.

A.2. Benefits, Costs, and Transfers Associated With Housing Goals Regulation

Within the statutory framework summarized in the preceding subsection, the role assigned to the Secretary of HUD is to establish housing goals, which may impose costs on the GSEs, for the public benefit. This chapter of HUD's regulatory analysis discusses the types of benefits and their magnitudes.[9]

The analysis is largely developed in terms of the analytical categories mandated by FHEFSSA: Important *national housing needs* are discussed and related to measures that the GSEs may take, motivated by the housing goals, to improve credit access and housing affordability and to increase homeownership opportunities for targeted groups. *Economic, housing, and demographic conditions* are highlighted, particularly for categories of households that have experienced problems of access to housing, including first-time homebuyers, racial and ethnic minorities, renters as well as homeowners, and low-income households which are supported by the goals. These distributional effects are among the most significant consequences of the housing goals. The analysis also considers the factors of *GSEs' past performance and effort, size of markets for goal-qualifying mortgages relative to the overall market, and GSEs' ability to lead the industry,* as a convenient framework for considering the ability of the GSEs to increase their performance within the time-frame presented by the goals, without disrupting markets within which they do their business. Finally, the analysis considers the *need to maintain sound GSE financial condition*, i.e., the potential costs and impacts on the GSEs' financial returns of raising the goals to various levels.

Circular A-4 directs agencies, when important benefits and costs are not monetized, to present a "threshold analysis" which presents a value of monetized net costs which must be overcome in order to generate positive net benefits. This can be done in terms of the overall situation of the GSEs as Government-sponsored enterprises, based on recent estimates of the GSEs' funding advantages compared to the value of benefits that they pass through to borrowers through reduced mortgage interest rates prepared by the Congressional Budget Office (CBO) and by Wayne Passmore, an economist with the Federal Reserve Board.[10] Although these two studies are concerned with the aggregate net borrowing advantage associated with GSE agency status overall, while this rulemaking is concerned with the appropriate setting of the three housing goals and associated subgoals, nevertheless the studies are helpful in identifying an order of

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[9] The GSEs are chartered as private corporations, governed by Boards of Directors, free to pursue profits in the interests of their shareholders, within their statutory framework as Government Sponsored Enterprises, subject to mission regulation by the Secretary of Housing and Urban Development and financial safety-and-soundness regulation by the Office of Federal Housing Enterprise Oversight. Their profit motivation is also a motivation for them to pursue efficiency in their operations.

[10] Congressional Budget Office, *Federal Housing Subsidies and the GSEs*, May 2001. "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. Wayne Passmore, "The GSE Implicit Subsidy and Value of Government Ambiguity," Board of Governors of the Federal Reserve System, FEDS working paper 2003-64, December 2003.

magnitude of benefits from the housing goals and other benefits generated by the GSEs by virtue of their agency status necessary to yield positive net benefits, in a cost-benefit analysis framework.

The two studies are similar in that they are based on estimates of the funding advantage of the GSEs' debt securities and mortgage-backed securities and estimates of the conforming-jumbo interest rate differential. CBO estimates a 41 basis point funding advantage on debt securities; Passmore, a 40 basis point advantage. CBO uses a figure of 5 basis points for net funding advantage on MBS; Passmore, a 2 basis point advantage. CBO performed regression analysis on conforming and jumbo mortgage rates and estimated a 22 basis point spread, to which CBO adds an estimate of 3 basis points effect on jumbo rates, for a total of 25; Passmore did regressions and found a 16-18 basis point jumbo/conforming spread. Passmore went on to perform a "second stage" analysis in which he disaggregated the spread into components reflecting differences (by month and state location of the mortgages) in various mortgage risk characteristics and in the estimated GSE funding advantage. Based on this analysis he concluded that the GSEs' effect on mortgage interest rates was around 7 basis points.[11]

CBO proceeds to estimate the net funding advantage to the GSEs which is not passed through to mortgage borrowers on debt securities and MBS issued by Fannie Mae and Freddie Mac in one year, in terms of a present value of current-year and discounted future values through the time the securities are repaid. The resulting estimate, for securities issued in 2000, is $3.9 billion, calculated as a gross funding advantage of $10.6 billion (which includes estimates for tax benefits and regulatory exemptions), less passed-through benefits (in reduced mortgage interest rates) of $6.7 billion.

Passmore pursues a different objective: He estimates the net funding advantage with respect to the two GSEs' entire businesses—all outstanding debt securities and MBS, plus the present value of projected future securities issuances, less estimated benefits passed through—expressed as a net present value. His after-tax median estimate (based on 1997-2003 data) is $72 billion, relative to which he acknowledges a substantial range of uncertainty. He estimates that the subsidy value is 60 percent of the market value of GSE stock, with a substantial range of variation around this figure.

These, then, are two estimates of the aggregate net advantages accruing to the two GSEs (i.e., net of the portion of the borrowing advantages that they pass through to mortgage borrowers in the form of reduced mortgage interest rates), one for annual net borrowing advantage and the other for discounted present value of current and projected future net borrowing advantage. The broad threshold analysis issue is whether the non-monetized benefits provided by the GSEs are commensurate. These benefits include not only the benefits associated with implementation of the housing goals administered by HUD which are the focus of this regulatory analysis, but also other categories of benefits,

[11] A methodological critique of Passmore's two-stage procedure may be found in a Fannie Mae-funded "Commentary on 'The GSE Implicit Subsidy and Value of Government Ambiguity'" by William Greene, an econometrics expert, at http://www.fanniemae.com/commentary/pdf/021804.pdf.

of which the literature discusses several including market stabilization, liquidity, and the GSEs' contribution to technological advances in the industry such as their development of automated underwriting systems, among others.[12]

For example, it can be argued that the GSEs have brought and maintain tremendous financial benefits to homebuyers both within and outside the conforming mortgage market through economies resulting from standardization and credit stabilization throughout the conventional mortgage market. Homebuyers at large benefit from lower interest rates and longer term mortgages than might otherwise prevail absent the substantial presence of government sponsored credit enhancements. Both longer-term mortgages and lower interest rates enable borrowers to leverage each dollar of income to support a larger mortgage or to qualify for a given mortgage amount with less income. Depending on the prevailing interest rate, homebuyers can borrow 6 to 8 percent more for every half-point reduction in interest and between 30 to 60 percent more with a 30-year mortgage rather than a 15-year loan. Thus, it could be argued that homebuyers at large derive substantial benefit from the GSEs in the absence of the GSE goals. The housing goals seek to bring these interest-rate-reduction benefits to qualified potential homebuyers who through fear or misunderstanding have not sought them or have been routed to a more costly non-GSE or FHA mortgage product.

While there could be several impacts of the additional GSE purchases, reduced interest rates for those lower-income borrowers who receive GSE loans under the new housing goals (as compared with the interest rates that they would have received without the expanded GSE outreach under the new housing goals) will likely be the main effect. These transfers to borrowers would come from the stockholders of lenders losing business and from the GSEs to the extent that they accept a lower return on equity on these loans. The additional single-family purchases are expected to total $20.750 billion in 2005, $39.000 billion in 2006, $50.750 billion in 2007, and $76.750 billion in 2008. Under the assumption that borrowers' interest costs are reduced by 25 basis points, the present value of these transfers to borrowers (assuming an average five-year holding period and a discount rate of 3 percent) would be $98 million in 2005, $184 million in 2006, $239 million in 2007, and $362 million in 2008. Alternatively, if borrowers' interest costs are reduced by 50 basis points, the present value of the transfers to borrowers would be $196 million in 2005, $368 million in 2006, $479 million in 2007, and $724 million in 2008.

The preamble and appendices to the final rule establish that the GSEs have increased their role in providing financing for low- and moderate-income housing, special affordable housing, and housing in underserved areas, with the effect of increased access to mortgage credit for the purchase of housing in these categories. The measures that the GSEs have taken to do this include innovative product development, more flexible underwriting guidelines taking advantage of new, computerized mortgage scoring

[12] These particular benefits are emphasized in papers in the recently published collection of Fannie Mae-sponsored research papers, *Housing Matters: Issues in American Housing Policy* (Fannie Mae, 2004) but they have long been focuses of attention in many previous discussions of GSE issues in the literature.

technology, and increased outreach to particular segments of the housing market (for example, borrowers with blemished credit, mortgages for first-time homeownership, and immigrants).

Within the framework of cost-benefit analysis, such impacts are distributional effects, and a threshold approach is appropriate. This Regulatory Analysis develops qualitative statements on the effects of the goals on the GSEs' business activities, coupled with a quantitative analysis of the profile of GSE loan and borrower characteristics as potentially affected by changes in the housing goals. The threshold issue is, then, whether the value of these effects exceeds the value of aggregate net advantages that accrue to the two GSEs, as described above (i.e., their borrowing advantages net of the portion that they pass through to mortgage borrowers in the form of reduced mortgage interest rates).

A.3. Alternatives Considered

HUD's regulatory approach first describes impacts of HUD's approach and then compares the impacts with those of two specific alternatives, namely—

> A "no-change approach" in which the Housing Goals would be extended at their current levels subject only to adjustment to reflect changes associated with replacing 1990 census data with 2000 census data as the basis for determining the levels of various parameters; and
>
> An approach of more substantial adjustment in goal levels, in which the subgoals would also be increased to higher levels for 2008 than those included in HUD's final rule.

A.4. Summary of Findings from Section C.4's Market Analysis of Additional GSE Goals Purchases

In their comments, both GSEs made several statements about the infeasibility of their accomplishing the housing goals, the likelihood they would have to "manage their denominator" (i.e., restrict their purchases of non-goals-qualifying loans in order to reduce their denominator in the goals calculation, so that their goals percentage would be high enough to meet the new targets), the negative impacts of the higher goals on middle-class borrowers, and the potential higher costs to lower-income borrowers as there would be less opportunity to cross-subsidize these borrowers with revenues from non-goals-qualifying borrowers. Many of the GSEs' comments dealt with the combination of a heavy refinance environment (such as 2002 and 2003) and the higher, out-year goals. As explained later, HUD is publishing in the Federal Register an Advance Notice of Proposed Rulemaking that advises the public of HUD's intention to consider by separate rulemaking a provision that recognizes and takes into consideration the impact of high volumes of refinance transactions on the GSEs' ability to achieve the housing goals in certain years, and solicits proposals on how any such provision should be structured and implemented. HUD also notes that FHEFSSA provides a mechanism by which HUD can take into consideration market and economic conditions that may make the achievement of housing goals infeasible in a given year. Still, the GSEs seemed to generalize their concerns to other economic environments as well (such as a home purchase environment).

Sections C.4e and C.4f of this chapter deal with these market issues by estimating the additional goals-qualifying purchases that Fannie Mae and Freddie Mac will have to make in order to meet the 2005-2008 goal and subgoal targets. Essentially, this involved projecting the goals percentages for each GSE based on their past behavior, estimating the extent to which each GSE's projected baseline performance fell short of the new goal and subgoal targets, estimating the additional purchases needed to satisfy the shortfalls, and expressing the additional GSE purchases as a share of the non-GSE portion of the conventional conforming market. More specifically, the modeling effort had the following three parts:

(1) Baseline Performance: The goals-qualifying purchases of each GSE were projected assuming that a home purchase environment will characterize the 2005-2008 market and assuming that the GSEs' will purchase single-family-owner (SFO) goals-qualifying loans at their 2001-2002 average rates for home loans (called Scenario A) and at their previous peak rates for home loans (called Scenario B).[13] The projection model also assumed an initial multifamily share of 10 percent for Freddie Mac and 12 percent for Fannie Mae. For each GSE, the projection model yielded baseline percentages for each of the three housing goals and three home purchase subgoals. **Shortfalls**, and the need for **additional purchases**, were then determined by comparing the baseline goals percentages with the new goal and subgoal target levels.

(2) Additional Goals-Qualifying Purchases. In cases where a GSE's baseline performance fell short of the goals, HUD's projection model estimated the additional single-family and multifamily purchases needed to satisfy that shortfall and meet the new goal and subgoal targets. As emphasized in Section C.4e, these additional-purchase scenarios were purely illustrative, as the GSEs could engage in a variety of purchase strategies to address their shortfalls. Still, the additional-purchase scenarios provide a sense of the effort needed by each GSE to meet the new goals and subgoals.

(3) Additional Purchases as a Share of the Non-GSE Market. The final step was to express the additional goals-qualifying purchases as a percentage of the non-GSE portion of the conventional conforming market which, for special affordable loans, was defined as the total special affordable market minus the GSEs' baseline purchases of special affordable loans. This percentage is an indicator of how far into the remaining market the GSEs would have to go in order to meet the new housing goals.

Main Findings from Market Analysis. The main findings concerning single-family market effects from the analyses conducted in Chapter III are as follows:

[13] Less affordable market environments were simulated by discounting the goals qualifying rates in scenarios A and B (e.g., 0.975 times scenario B, 0.95 times scenario B)

- Fannie Mae's projected baseline performance would surpass the 2005 and 2006 goals and almost meet the 2007 goals. While Fannie Mae would have to improve its past performance in order to meet the 2007 and 2008 goals, the new housing goals and subgoals appear quite feasible for Fannie Mae. Even in those scenarios that assumed less affordable market conditions, and thus projected a lower baseline performance for Fannie Mae, the firm would have time to develop strategies to meet the out-year (2007 and 2008) goal targets. The concerns raised about "denominator management" do not seem to be an issue for Fannie Mae. Given its focus (as compared with Freddie Mac) on purchasing mortgages for single-family rental and multifamily rental properties, and given its recent improvement in purchasing single-family-owner mortgages that qualify as special affordable and low-mod, Fannie Mae is projected to have a relatively high baseline performance during a home purchase environment, which places it in a good position to meet the new housing goal targets.

- The situation is different for Freddie Mac. Freddie Mac does not focus as much as Fannie Mae on rental mortgages, and Freddie Mac has not purchased goals-qualifying SFO loans to the same degree as Fannie Mae. Thus, HUD's model projects a lower baseline performance for Freddie Mac and a large shortfall from the goal targets, particularly during 2007 and 2008.

- While the 2007 goals will be challenging for Freddie Mac, they will be feasible with more effort by Freddie Mac. Considering two scenarios (A and B) for meeting the 2007 goals, Freddie Mac would have to increase (over baseline) its SFO special affordable purchases by 20-25 percentage points, its SFO low-mod and underserved area purchases by about 10-15 percent, and its MF purchases by 20-26 percent (thereby raising its MF mix from 10.0 percent to almost 11.5 percent). Obviously, the most challenging goal for Freddie Mac (as well as for Fannie Mae) is the special affordable goal.

- The 2008 goals would require even further increases in goals-qualifying purchases for Freddie Mac. Under the same two scenarios, Freddie Mac would have to increase its SFO special affordable purchases by 30-38 percent to meet the 2008 goals, its SFO low-mod purchases by 13-18 percent, its SFO underserved area purchases by 20-24 percent, and its MF purchases by 28-34 percent (thereby raising its MF mix from 10.0 percent to almost 12 percent).

- Section C.4e notes that if Freddie Mac's business was more like Fannie Mae's (i.e., more targeted SFO purchases and more purchases of mortgages for rental properties), it would not fall so far short of the new 2007-2008 housing goals. Given the staged increases of the goals, and the fact that the 2005 and 2006 goals appear quite feasible for Freddie Mac, the firm will have time to develop its own strategy for satisfying the more challenging goals during 2007 and 2008.

- To gauge how far into the market the GSEs will have to go to meet the new goals, the additional goals-qualifying purchases were expressed as a percentage share of the remaining, non-GSE portion of the conventional conforming market. Under the same two scenarios, the additional purchases needed to meet the 2007 goals represented the following shares of the non-GSE market: (1) 9-14 percent for special affordable; (2) 5-9 percent for low-mod; and (3) 5-8 percent for underserved areas. To meet the 2008 goals, the remainder-of-the market shares are higher, particularly for the special affordable category: (1) 21-26 percent for special affordable; (2) 10-13 percent for low-mod; and (3) 9-12 percent for underserved areas. Most of these additional purchases (about two-thirds) would be made by Freddie Mac.

- Whether the GSEs could meet the 2007 and 2008 targets without loosening their underwriting standards in any significant way cannot be shown conclusively by an analysis like this. Freddie Mac, in particular, has to increase its goals purchases (including single-family and multifamily loans) much more than Fannie Mae, which suggests new products might have to be developed, outreach to lower-income markets might have to be increased, and underwriting and purchase guidelines might have to be made more flexible.

- Section C.4 presents data showing that the GSEs' goals-qualifying purchases are often characterized by low LTV ratios (i.e., high down payments) and high FICO scores – suggesting that the GSEs have not had to extend themselves a great deal to meet the past goal levels. However, given the above findings concerning the additional required purchases, it is anticipated that the GSEs will have to move deeper into the lower-end of the affordable market in order to reach the new housing goal and subgoal targets. In other words, the GSEs' goals-qualifying loans will include more low-downpayment and more low-credit-score loans than they have in the past.

- Section C.4f and Chapter VI present analyses showing that the GSEs' financial returns on equity (ROEs) may go down somewhat as a result of their having to increase their goals-qualifying purchases in order to meet the new housing goal and subgoal targets. Still, the GSEs' ROEs on their goals-qualifying purchases will continue at more than reasonable levels, given the GSEs' expertise in controlling credit risk and their reliance on credit enhancements (e.g., private mortgage insurance) to limit their losses from mortgage defaults. In addition, the GSEs' overall ROEs (on both their goals-qualifying and non-goals-qualifying business) will only be modestly reduced from past levels, unless there is a significant deterioration in market conditions.

- With respect to single-family market effects, the analyses in Sections C.4e-f make clear that the GSEs are going to have to step up their efforts and go beyond the recent improvements that they have made. Several market strategies are available -- introducing new targeted products, adjusting their underwriting standards to be more flexible, purchasing more seasoned CRA-type loans, moving further into the subprime markets, and attempting to attract FHA borrowers that meet their underwriting standards.

B. The Housing Goals and Some Background Information

B.1. Description of Housing Goals and Subgoals[14]

The Low- and Moderate-Income ("low-mod") Goal is intended to achieve increased purchases by the GSEs of mortgages on housing for low- and moderate-income families—i.e., families with incomes below the median income for the area. After consideration of the relevant factors, HUD has determined that the annual goal for mortgage purchases qualifying under the Low-and Moderate-Income Housing Goal be 52 percent of eligible units financed in calendar year 2005, 53 percent in 2006, 55 percent in 2007, and 56 percent in 2008.

The Underserved Areas Housing Goal is intended to achieve increased purchases by the GSEs of mortgages on housing for housing located in "central cities, rural areas, and other underserved areas." The goal established by HUD targets the sections of these areas which have historically been underserved by the primary and secondary mortgage markets. After consideration of the relevant factors, HUD has determined that the annual goal for mortgage purchases qualifying under the Underserved Areas Goal be 37 percent of eligible units financed in calendar year 2005, 38 percent in 2006 and 2007, and 39 percent in 2008.

The Special Affordable Housing Goal is designed to target mortgages on rental and owner-occupied housing to meet needs of low-income families in low-income areas and very low-income families. HUD has determined that the annual goal for mortgage purchases qualifying under the Special Affordable Housing Goal be 22 percent of eligible units financed in calendar year 2005, 23 percent in 2006, 25 percent in 2007, and 27 percent in 2008.

Subgoals. In 2000 HUD discussed the option of establishing home purchase mortgage subgoals. The Department reviewed the comments on that proposal, but decided not to institute such subgoals in the final 2000 rule. In this rule, the Department is proposing to establish such home purchase subgoals for 2005-2008.

Given the Administration's emphasis on increasing homeownership opportunities, including those for low and moderate-income and minority borrowers, this rule, in addition to establishing overall goals, proposes 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 establishing subgoals for home purchase loans that qualify for the Housing Goals ("Home Purchase Mortgage Subgoal" or "Subgoal"). As discussed in Section C.1 below and in Chapter IV, the Department's analysis shows that

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[14] This section provides an overview of the housing goals and subgoals. The specific rationales for the home purchase subgoals and for increasing the housing goals are detailed in Sections C.1 and C.2 below.

the GSEs historically have not been leading the market in purchasing single-family, owner-occupied loans that qualify for the Housing Goals. The purpose of the Home Purchase Mortgage 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 Mortgage 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 single-family properties and are fully capable of exerting such leadership.

As detailed in Chapter IV, 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 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. The specific rationales for the Subgoals are discussed further in Section C.1 below.

Under the final rule, performance on the Home Purchase Mortgage Subgoals would be calculated as 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.[15] Specifically, for each GSE the following subgoals would apply:

- 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, 46 percent in 2006, and 47 percent in 2007 and 2008;

- 32 percent of home purchase mortgages purchased by the GSE in metropolitan areas must qualify under the Underserved Areas Housing Goal in 2005, 33 percent in 2006 and 2007; and 34 percent in 2008; and

[15] The subgoals are expressed in terms of percentages of mortgages financed on owner-occupied 1-4 unit homes, rather than in terms of the shares of dwelling units in such properties. This departure from the normal units-based approach is due to the fact that the primary mortgage market data, provided in accordance with the Home Mortgage Disclosure Act, do not indicate the numbers of units in properties financed. Thus units-based market estimates are not possible for home purchase mortgages, but mortgage-based market estimates can be made.

- 17 percent of home purchase mortgages purchased by the GSE in metropolitan areas must qualify under the Special Affordable Housing Goal in 2005 and 2006, and 18 percent in 2007 and 2008.

Analysis of the GSEs' performance on the subgoals is provided in Sections C.1 and C.4.

B.2. Background: Feasibility of Housing Goals

An important issue with respect to determining the housing goals is the general issue of the feasibility of the specific goal targets. That is, are the goal targets feasible based on the GSEs' capacity (as indicated by past performance, for example) and by the opportunities in the marketplace. The FHEFSSA section 1336(b) states that if the Secretary determines that an enterprise has failed, or that there is a substantial probability that an enterprise will fail, to meet any of the three housing goals, the Secretary shall provide written notice to the enterprise of such a determination, the reasons for such determination, the requirement to submit a housing plan under subsection (c) of this section, and the information on which the Secretary based the determination or imposed such requirement. The enterprise may then submit to the Secretary any written information that the enterprise considers appropriate for consideration by the Secretary in determining whether such failure has occurred or whether the achievement of such goal was or is feasible. The Secretary shall then determine (i) whether the enterprise has failed, or there is a substantial probability that the enterprise will fail, to meet the housing goal, and (ii) 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; and only if the goal is determined to be feasible may the Secretary take further regulatory action.

The feasibility of the housing goals is one factor in HUD's providing a range of market estimates, in order to allow for some variation in economic and mortgage market conditions during the 2005-08 period covered by the new goals. The discussion below of the final and alternative housing goals will present additional information related to the likely feasibility of the housing goals. These will include a range of indicators and analyses—comparing the GSEs' past performance with the new housing goal targets, projecting the GSEs' baseline performance under different market conditions (i.e., estimating what each GSE's goals performance would be assuming no change in the goal targets), estimating the additional goals-qualifying purchases needed for each GSE to meet the new goal targets, expressing the additional goals-qualifying purchases as a share of the number of loans originated in the non-GSE portion of the conventional conforming market, and considering the effects on the GSEs' financial returns as explained in Chapter VI. To meet the higher goals in 2008 will require that the GSEs expand their level of involvement in the markets for mortgages on single-family rental housing and multifamily properties. Freddie Mac's performance has lagged behind Fannie Mae's, so Freddie Mac will need to take particularly major actions to bring its performance level up to the required levels.

The new housing goals and subgoals are based on a recognition that there is substantial room for the GSEs to grow in certain market segments. For example, consider the comparison provided in Chapter IV of the GSEs' role in the overall market with their role in the special affordable market. Between 1999 and 2002 the GSEs' purchases provided financing for approximately 26.1 million dwelling units, which represented 55 percent of the estimated 47.5 million single-family and multifamily units that were financed in the conventional conforming market in that 4-year period. However, in the special affordable part of the market, the 5.1 million units that were financed by GSE purchases represented only 41 percent of the estimated 12.4 million dwelling units that were financed in the market. Thus, even though under certain circumstances the GSEs may find certain segments of the special affordable market challenging, these data suggest there is room for the GSEs to improve their performance in the remaining 60 percent of the special affordable market. Additional comparisons will be made in the discussion below.

C. Analysis of Goals and Subgoals

This section summarizes the basic rationales for the GSE housing goals and the home purchase subgoals. The goals and subgoals are both integral parts of HUD's overall proposal—the subgoals, to encourage the GSEs to purchase home mortgages that reduce interest costs and improve credit access for lower-income homebuyers, and the overall goals, to ensure that the GSEs also continue their support for affordable rental housing and facilitate mortgage refinancings, which improve housing affordability and provide a source of funds for homeowners to purchase other items. This section looks at the rationale, benefits, and costs of both the goals and subgoals. The main benefit includes enhanced financing of mortgages for lower-income and underserved families that qualify for the goals. To provide some indication of the likely impacts of the goals, this section also summarizes various activities the GSEs have undertaken in response to the housing goals in recent years and that may continue to be taken in response to these goals, including, for example, increased flexibility in their mortgage underwriting, introduction of special affordable products, purchases of seasoned mortgages from portfolio lenders, stepped-up purchases in mortgage markets where they have traditionally played a minor role, and an enhanced role in the subprime mortgage market. Sections D and E below consider two alternatives—one set which would establish higher targets and one set which would establish lower targets.

C.1. Rationale for Home Purchase Subgoals

This section and section C.2 discuss the main reasons that underlie HUD's regulation to increase the levels of the goals and establish home purchase subgoals. The purpose is to summarize the benefits of introducing the new home purchase subgoals and of increasing the targets on the overall housing goals. Thus, these sections highlight the nature of the benefits from the housing goals, as well as providing a necessary background for examining the impacts of the goals and of alternative sets of goals in later sections. This discussion draws heavily from Chapter IV of this Regulatory Analysis and from the Preamble and the summary sections of Appendixes A-C of the Final GSE Rule. (Readers who are familiar with HUD's rationale as presented in the preamble and appendixes may wish to skip to Section C.3.)

As explained below, meeting the home purchase subgoals will assist the GSEs in meeting the overall goals. Thus, this section focuses on the home purchase subgoal, while the next section examines the overall housing goals. Because of the importance of home purchase loans in the GSEs' overall business, the GSEs' performance on the home purchase subgoals will impact their performance on the overall goals. Therefore, there is some overlap in the various rationales for the subgoals and overall goals.

a. Ability to Lead the Home Purchase Market

As explained in Appendix A of the GSE Rule, the GSEs have the ability to lead the primary market for single-family-owner loans, which is the "bread-and-butter" of their business. Both GSEs have long experience in purchasing home purchase loans and have developed enormous capacity in funding single-family loans in the conventional conforming market. Their underwriting standards and purchase guidelines are used by primary lenders throughout that market; the GSEs have also taken the lead in the introduction of new technologies (e.g., automated underwriting) in this market. Thus, there is no issue of the degree to which the GSEs can penetrate the market, as there is with the single-family rental and multifamily markets (see discussion below)—together, the GSEs fund the majority of new originations in the conventional conforming market. In addition, because the subgoals focus on home purchase loans, and thus do not include refinance loans, there is no "denominator" issue involved which could impose difficulties in meeting the subgoals during heavy refinance waves such as those in 1998 and 2001-2003. To conclude, there is no reason that the GSEs cannot lead the market in purchasing affordable home loans.

b. The GSEs Have Historically Lagged the Home Purchase Market

Even though the GSEs have the ability to lead the primary market for single-family home purchase loans, they have not done so under the housing goals. Section D of Chapter IV of this Regulatory Analysis provides a detailed analysis of the GSEs' performance in purchasing home loans for first-time homebuyers and for underserved borrowers that qualify for the housing goals. Except for Fannie Mae's recent performance on the low-mod and special affordable categories, the GSEs have generally lagged the primary market in funding goals-qualifying loans since FHEFSSA was enacted in 1992. In addition, their performance serving first-time homebuyers has been much below market performance. (See Section E and F of Chapter IV and Section E of Appendix A of the Final GSE Rule.)

c. The GSEs Have Improved Their Home Purchase Performance

Under the housing goals, the GSEs have demonstrated that they can improve their performance, which suggests they have the capacity to lead the market in purchasing home loans covered by the housing goals. Along with mortgage lenders and private mortgage insurers, Fannie Mae and Freddie Mac have expanded their programs and implemented underwriting changes for purposes of increasing their business at the lower-income end of the market. Section F of Chapter IV reviews the wide variety of affordable lending initiatives that the industry and the GSEs have undertaken during the past few years. These initiatives are having an impact; for example, Home Mortgage Disclosure Act (HMDA) data indicate that conventional home purchase loans to low-income and minority borrowers have increased at much faster rates than loans to other borrowers (see Section C.2 of Chapter IV).

As a result of their efforts, the performance of both GSEs in funding historically underserved borrowers has significantly increased since 1993, when the housing goals were first put in place. For example, the special affordable share of Freddie Mac's purchases of home loans increased from 6.5 percent in 1992 to 15.6 percent in 2003; in addition, Freddie Mac's recent performance has been much closer to the market than its earlier performance. The special affordable share of Fannie Mae's purchases also increased, from 6.3 percent in 1992 to 17.1 percent in 2002.[16] It is also encouraging that Fannie Mae markedly improved its affordable lending performance relative to the market during 2001-2003, the first three years of HUD's higher housing goal levels. Fannie Mae's performance during 2003 led the market on the special affordable and low categories Chapter IV documents the recent improvement of both GSEs during 2001-2003 under the higher housing goal targets that HUD implemented in 2001. This experience demonstrates that the GSEs can improve their performance and that they have the capacity to lead the single-family market in purchasing goals-qualifying loans.

d. Need Continues to Exist

Section B of Chapter IV documents the substantial need for improved credit access for lower-income families and for those living in historically underserved neighborhoods (i.e., low-income and high-minority census tracts). 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 2003, 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 conventional lenders, leaving those areas to higher-cost subprime and FHA lenders.

The GSE housing goals are designed to provide one mechanism for addressing these credit problems. For example, consider the underserved areas goal, which is highly targeted to areas experiencing credit problems. The existence of substantial neighborhood disparities in mortgage credit is well documented for metropolitan areas. Research has

[16] These special affordable percentages are based on 1990-based Census data and OMB definitions of metropolitan areas in effect during 2002.

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 (see Appendix B of the GSE Rule). Thus, the income and minority composition of an area is a good measure of whether that area is being underserved by the mortgage market.[17] Research supports a targeted neighborhood-based definition of underservice, along the lines of the current goal definition.[18]

As discussed in Section B.6 of Chapter IV, there is also a large potential population that could benefit from affordable initiatives introduced by the GSEs to meet the two borrower low-income goals. Numerous surveys by Fannie Mae and other industry organizations show that current renters have a strong desire to become homeowners and hope to do so in the near future. 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 non-traditional 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. These are the types of borrowers targeted by the special affordable goal and, to a lesser extent, by the low-mod goal.

Thus, while the GSEs have offered new affordable products and reached out to underserved borrowers over the past few years, there remains much more that they can do under both the three housing goals and the home purchase subgoals.

e. Opportunities Exist for the GSEs to Improve Further

As the above discussion suggests, home purchase loans that qualify for the housing goals will continue to be available for the GSEs to purchase, which means the GSEs can improve their performance and lead the primary market in purchasing loans for

[17] 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.

[18] As detailed in Appendix B of the proposed GSE rule, "underserved" means those areas that have an unmet demand for mortgage credit. An important issue in HUD's 1995 rule was the degree to which geographic areas under this goal should be targeted. The selection of a targeted approach in metropolitan areas has the benefit of more efficiently directing mortgages to those urban neighborhoods that have previously lacked access to mortgage credit. The Department adopted a targeted approach in the 1995 final rule, and continued and refined it in the 2000 final rule.

lower-income borrowers and properties in underserved areas. Chapter IV discusses the following specific indicators:

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 goal categories are as follows: 16.2 percent for special affordable, 31.4[19] percent for underserved areas, and 44.1 percent for low- and moderate-income.

Second, market share data reported in Section H of Chapter IV show that approximately half of newly-originated loans that qualify for the housing goals are not purchased by the GSEs. 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 first-time 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 goals-qualifying loans.

C.2. Rationale for Higher Levels of Overall Housing Goals

As noted earlier, the Department is increasing the overall housing goal levels After commenting on the GSEs' recent performance under the housing goals, this section discusses the rationale for increasing the housing goals to these levels.

Many housing industry participants and analysts believe that the overall housing goals established by HUD have been a major factor underlying the increases in the GSEs' affordable lending performance in recent years. Fannie Mae's performance on the low-mod goal rose by 50 percent, from 34.2 percent in 1993 to 51.2 percent in 2000, the peak year for its low-mod performance; Fannie Mae's performance during the heavy refinancing years of 2001, 2002, and 2003 was 48.7 percent, 47.9 percent, and 49.5 percent, respectively. Freddie Mac's record showed a 69 percent improvement over this same period, rising from 29.7 percent in 1993 to 50.2 percent in 2000; Freddie Mac's performance during the heavy refinancing years of 2001, 2002, and 2003 was 47.0 percent, 44.6 percent, and 45.3 percent, respectively. During the 1996-2000 period,

[19] Percentages are based on 2000 Census data and new OMB definitions of metropolitan areas.

Fannie Mae's performance on the special affordable goal increased from 16.7 percent to 21.7 percent, before falling to 20.1 percent in 2001 and 19.4 percent in 2002 and then rebounding to 20.8 percent in 2003, while Freddie Mac's performance on the special affordable goal increased from 14.0 percent to 20.8 percent, before falling to 19.1 percent in 2001 and 17.3 percent in 2002 and then rebounding to 19.0 percent in 2003. But despite their increased performance, the GSEs have lagged significantly behind the market (see the 1999-2002 market estimates in Table 3.2a). Thus, this section also discusses issues related to the GSEs' performance relative to the market.

The reasons the Department is proposing to increase the level of the housing goals are summarized below. For a more extensive discussion, see the Preamble and the summary sections of Appendices A-C of the GSE Rule.

a. Factors Listed Above for the Home Purchase Subgoals

The GSEs' purchases covered by the home purchase subgoals account for a significant portion of the GSEs' business. Therefore, the various reasons given above for proposing new home purchase subgoals also apply to increasing the overall housing goals. Briefly, the reasons are (1) the GSEs have the resources and the ability to lead the market in providing affordable loans; (2) until Fannie Mae's recent performance on the special affordable and low-mod categories, the GSEs had not led the market, even though they have had 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 performance in the home purchase market. The remainder of the discussion provides a more complete picture of the GSEs' activities, including the refinance portion of the single-family-owner market and the rental portion of the market.

b. Continued Need in the Overall Market

This section focuses on needs in the portions of the overall market not included in the home purchase subgoals—namely, the rental market (both multifamily and single-family rental units) and the refinance mortgage market, as they affect families targeted by the housing goals.

"Worst Case" Renters. With regards to renters, data from the American Housing Survey demonstrate that there are substantial housing needs among low- and moderate-income families, especially among lower-income and minority families in this group. 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 entry-level occupations. According to HUD's "Worst Case Housing Needs" report, 5.07 million very low-income unassisted renter households paid more than 50 percent of their income for housing or lived in seriously inadequate housing in 2001. This was up from the corresponding figure of 4.86 million "worst case needs" in 1999.[20]

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[20] *Trends in Worst Case Needs for Housing, 1978-1999,* Department of Housing and Urban Development, Office of Policy Development and Research, (December 2003).

Other renters. This "Worst Cases" study focuses on the problems faced by very low-income renters—those with incomes less than 50 percent of area median family income. But it also contains information on renters with incomes between 51 percent and 80 percent of area median income (referred to here as "R51-80 renters")—these families' units would also qualify under HUD's low- and moderate-income goal. Their problems are not as severe as those in the "Worst Cases" category, but they are significantly greater than those faced by higher-income renters, especially those with incomes in excess of 120 percent of area median income (referred to here as "R120+ renters"). For example, 30.5 percent of R5180 renters paid more than 30 percent of their income in rent, while only 2.5 percent of R120+ renters were in this category. And 36.8 percent of R5180 renters reported priority problems or "other problems," well above the corresponding figure of 11 percent for R120+ renters. On the other side, 87.8 percent of R120+ renters reported no problems, much higher than the 58.5 percent of R5180 renters.

Needs of single-family renters. One particular area where the GSEs could play a greater role is in the mortgage market for single-family rental dwellings. These properties, containing 1-4 rental units, are an important source of housing for low- and moderate-income families, but the GSEs have not played a major role in this mortgage market. The Department recognizes that such properties, which are generally owned by "mom and pop" businesses, are not financed in the secondary market to the same extent as mortgages on one-unit owner-occupied properties. Single-family rental properties are very heterogeneous, making it more difficult to develop standardized underwriting standards for the secondary market. However, the GSEs can do more to play a leadership role in providing financing for such properties. They have increased their role in this market in the 2001-03 period, and the experience from that period should enable them to further step up their participation.

Benefits of Refinancing to Targeted Families. HUD's home purchase subgoals do not indicate that the Department is unmindful of the benefits of refinancings to families targeted by the overall housing goals. Borrowers typically refinance their mortgages in order to lower the interest rate on their loans, to change the term (duration) of the mortgage, or to undertake "cash-out refinancings," in which the new loan amount exceeds the unpaid principal balance on their previous loan. Thus under a "cash-out refi" a borrower taps into the equity on his home to finance other expenses, which may or may not be housing-related. Borrowers whose main goal is a rate reduction generally refinance in low interest rate periods, but "cash-out" refinancers may be less sensitive to interest rate changes. Higher-income borrowers are most likely to refinance their loans when interest rates are lowest, as shown in a recent HUD study, which presented the distribution of refinance mortgages by income level for the 1998-2000 period.[21] That study also presented average interest rates for this period, as reported by the Federal Housing Finance Board—these ranged from 7.10 percent in 1998 to 7.96 percent in 2000.

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[21] Paul B. Manchester, *Goal Performance and Characteristics of Mortgages Purchased by Fannie Mae and Freddie Mac, 1998-2000,* Working Paper in Housing Finance No. HF-015, May 2002.

Nearly 60 percent of refinancers with incomes in excess of area median income took out their new loans in 1998, when mortgage rates were at the lowest level of this period, but only 47 percent of very low-income refinancers took advantage of these lowest rates. In contrast, only about 10 percent of above-median income refinancers were in the market in the higher interest rate year of 2000, compared with 17 percent of very low-income refinancers. Thus, higher-income borrowers tend to dominate the market during heavy refinance years such as 1998.

Data on the interest rates on individual loans is not available, but the timing of refinancings suggests that on average lower-income families paid higher rates on their refinancings than higher-income borrowers for the 1998-2000 period as a whole. This may reflect better knowledge of the benefits of refinancing among higher-income borrowers, or it may be because lower-income borrowers are more likely to take out "cash-out refis." Whatever the case, this data demonstrates the potential benefits of refinancings to lower-income homeowners, and it indicates that there would be benefits from better educating lower-income homeowners about the gains from refinancing their loans in low-interest rate periods.

c. Market Opportunities in the Overall Market

The GSEs appear to have substantial room for growth in serving the overall affordable housing mortgage market. As shown in Table 4.4 of Chapter IV, Fannie Mae and Freddie Mac accounted for 55 percent of the total (single family and multifamily) conventional, conforming mortgage market between 1999 and 2002. In contrast, GSE purchases comprised 48 percent of the low- and moderate-income market, 48 percent of the underserved areas market, and a smaller 41 percent of the special affordable market. Thus, 52-59 percent of the goals-qualifying markets has 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 (both single-family and multifamily) market was only 37 percent during the 1999-to-2002 period.[22] Obviously, there is room for the GSEs to increase their presence in the single-family rental and multifamily rental markets. As noted below, it is recognized that the GSEs will face challenges in these markets, and may never penetrate them to the same degree that they penetrate the single-family-owner market. But their low current market shares suggest that there are ample opportunities for the GSEs to increase their presence in these markets and improve the affordability of rental housing for low-income families. Likewise, studies show there are opportunities for the GSEs to improve their purchases in underserved areas.

The GSEs have indicated that they expect their role in the mortgage market to continue to increase in the future, as they develop new products, refine existing products, and enter markets where they have not played a major role in the past. The increased housing goals and new subgoals anticipate that their involvement in the targeted end of the mortgage market will continue to increase. There are a number of segments of the

[22] As shown in Table 4.5b of Chapter IV, the GSEs' share of the rental mortgage market increases to 41 percent when a lower multifamily share of the mortgage market is assumed in HUD's market sizing model.

single-family-owner, single-family rental and multifamily markets that the GSEs have not tapped and where the GSEs might play an enhanced role, thereby increasing their shares of targeted loans and their performance under the housing goals. These areas are discussed in the Appendices A-C of the GSE rule and Chapters 4 and 5 of this Regulatory Analysis.

d. Impact of Multifamily Mortgage Purchases on Goal Performance

Fannie Mae and, especially, Freddie Mac have rapidly expanded their presence in the multifamily mortgage market under the housing goals. In the past, the limited role of the GSEs, and particularly Freddie Mac, has been a constraint limiting the increase in 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 during the next three years (1998 to 2000), before rising further to $11.9 billion in 2001, $14.3 billion in 2002, and $21.6 billion in 2003. Multifamily accounted for 9.1 percent of all dwelling units (both owner and rental) financed by Freddie Mac between 1999 and 2001. Concerns regarding Freddie Mac's multifamily capabilities no longer constrain their performance with regard to the housing goals. 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 $9-10 billion in 1999 and 2000, and over $18 billion in 2001 and 2002, reaching $33.3 billion in 2003. Multifamily accounted for 10.6 percent of all dwelling units (both owner and rental) financed by Fannie Mae between 1999 and 2001. During the heavy refinancing year of 2002, multifamily units accounted for slightly over seven percent of all dwelling units financed by both Fannie Mae and Freddie Mac.

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 Goals, since a very high percentage of multifamily units have rents which are affordable to low- and moderate-income and special affordable families. 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 35 to 41 percent of the multifamily units that received financing during this period (see Tables 4.4 and 4.5b in Chapter IV). Certainly there are 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.

e. Goal Levels More Consistent with Market Shares

One factor that HUD is required to take into account in establishing the housing goals is the size of the conventional conforming mortgage market serving families eligible to obtain mortgage financing that would qualify under each goal, relative to the size of the overall conventional conforming mortgage market. HUD's market share methodology and specific estimates of the size of the low- and moderate-income market are discussed in detail in Appendix D of the GSE rule. The market estimates for the years covered by the new housing goals (2005-2008) are as follows:

- 51-56 percent for the Low- and Moderate-Income Housing Goal
- 23-27 percent for the Special Affordable Housing Goal
- 35-39 percent for the Underserved Areas Housing Goal (based on 2000 Census geography).

The 51-56 percent estimate is interpreted as follows: 51-56 percent of all dwelling units (both owner and rental) that are financed in the conventional conforming market qualify for the low- and moderate-income goal. The market estimates include the effects of all three major property types: (1) single-family-owner-occupied units, (2) single-family-rental units, and (3) multifamily units. The market estimates exclude the B&C (subprime loans that are not A-minus grade) portion of the subprime market.

There are two reasons that each market estimate is reported as a range, rather than as a point estimate. First, a variety of data sources had to be pulled together and several assumptions had to be made in order to produce a market estimate that covered both the owner and rental markets; thus, the range incorporates some degree of uncertainly around the various estimates (such as the size of the multifamily market), although sensitivity analyses reported in Appendix D of the GSE Rule indicate that the estimates are robust with respect to reasonable changes in assumptions. Second, and more importantly, the estimates are expressed as ranges to allow for economic and market affordability conditions that are more adverse than recent conditions. The low-end of each range reflects market conditions (e.g., high interest rates) that might limit the entry of lower-income families into the mortgage market, as compared with recent periods of record housing affordability. Appendix D provides examples of the mortgage market environments that are captured by the above market ranges. The last few years have been characterized by record affordability conditions and high market shares for goals-qualifying loans. (See Table 3.1 for recent estimates of market performance.)

The relationship of the goal levels to the market shares will be discussed in more detail later. However, as background for that discussion, a few points can be made at this stage based on the information in Tables 3.1 and 3.2a. These tables summarize the Department's findings regarding GSE performance relative to market projections for 2005–2008 and the new Housing Goal levels for 2005–2008. The analysis is based on 2000 Census data on area median incomes and minority concentrations, using the metropolitan area boundaries specified by OMB in June 2003. 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 (MSAs) as defined prior to 2000.

Tables 3.1 and 3.2a reveals several features of HUD's Housing Goals. First, it is evident that the initial new level (22 percent) for the Special Affordable Housing Goal is below the low end (23 percent) of HUD's projected market range for 2005–2008. The initial level (52 percent) of the Low- and Moderate-Income Housing Goal is slightly above the low-end (51 percent) of HUD's market estimate range.

TABLES 3.1 AND 3.2a

Second, the initial Underserved Areas Housing Goal level (37 percent) is more consistent with the market range (35-39 percent) now projected by HUD for the Housing Goals using 2000 Census data than the current goal level (31 percent).

Third, the GSEs' performance on all of the Housing Goals was significantly below the market averages for 1999–2002. Appendix D provided market estimates for the years 1999-2002 under different assumptions about the multifamily mix (i.e., newly-mortgaged multifamily units as a share of all financed dwelling units); these estimates are reported in Table 3.2a. The estimates differed between the two home purchase years (1999 and 2000) and the heavy refinance years (2001 and 2002). For the low-mod goal, the estimates averaged 56.4 percent for the two home purchase years and 51.9 percent for the two heavy refinance years, with the overall 1999-2002 low-mod average being 54.1 percent (five percentage points above Fannie Mae's performance and seven percentage points above Freddie Mac's performance).[23] The market estimates for the underserved areas goal averaged 37.3 percent (38.4 percent during the two home purchase years and 36.3 percent during the two heavy refinance years), or approximately 2-5 percentage points above the GSEs' average performance (see Tables 3.1 and 3.2a). 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.

f. Ability of the GSEs to Lead the Overall Market

Given that the housing goals are set below the market levels, this raises a question about whether the goals should be set higher so that the GSEs would be leading the market. It was Congress' intention that the ability of the GSEs to lead the industry be an important factor in setting the overall housing goals. The legislative history of FHEFSSA indicates Congress's strong concern that the GSEs need to do more to benefit low- and

[23] The lower market shares during the two heavy refinance years of 2001 and 2002 were due mainly to a reduction in the low-income share of the single-family-owner refinance market and to a reduction in the multifamily share of the market (due to the substantial increase in single-family-refinance originations).

Table 3.1

Percentages of Eligible Units Financed and HUD's Housing Goals

	2001-2004 Housing Goals	2005-2008 Housing Goals				GSEs' Average Baseline Performance 1999-2003 (Fannie Mae/ Freddie Mac)	HUD's Projected Market Estimate[1]
		2005	2006	2007	2008		
Low- and Moderate-Income	50%	52%	53%	55%	56%	49% 47%	51-56%
Underserved Areas	31%[2]	37%	38%	38%	39%	35% 32%	35-39%
Special Affordable	20%	22%	23%	25%	27%	20% 19%	23-27%

[1] See Appendix D for an explanation of the market estimates.

[2] 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.

Table 3.2a

Housing Goals, Alternatives, and 1999-2002 Performance

Goal	GSEs' Purchases 1999	2000	2001	2002	2003	Unweighted Average	Market (W/O B&C Loans)* 1999	2000	2001	2002	1999-2002
Low- and Moderate-Income Goal											
Fannie Mae	46.3%	51.2%	48.7%	47.9%	49.5%	48.7%					
Freddie Mac	46.0%	50.2%	47.0%	44.6%	45.3%	46.6%					
							55.4%-56.2%	56.5%-57.4%	51.6%-52.3%	51.4%-52.1%	53.7%-54.5%
Underserved Areas Goal											
Fannie Mae	31.6%	37.5%	35.7%	35.0%	34.1%	34.8%					
Freddie Mac	31.6%	34.1%	32.5%	32.4%	31.7%	32.5%					
							36.9%-37.6%	39.2%-39.7%	36.4%-36.9%	35.7%-36.2%	37.1%-37.6%
Special Affordable Goal											
Fannie Mae	18.6%	21.7%	20.1%	19.4%	20.8%	20.1%					
Freddie Mac	17.4%	20.8%	19.1%	17.3%	19.0%	18.7%					
							27.2%-27.9%	28.2%-29.1%	24.4%-25.0%	23.7%-24.3%	25.9%-26.6%

	Projected Market Range
Low- and Moderate-Income	51%-56%
Underserved Areas	35%-39%
Special Affordable	23%-27%

NOTE: Based on counting rules for 2005-2008, defined using 2000 Census data and geography, including metropolitan areas as defined by OMB on June 30, 2003.
* See Appendix D of the Final Rule.

moderate-income families and residents of underserved areas that lack access to credit.[24] 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."[25] FHEFSSA, therefore, specifically required 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 Community Reinvestment Act[26] and fair lending laws[27] in order to expand access to capital to those historically underserved by the housing finance market.[28]

The earlier discussion of the home purchase subgoals argued that the GSEs have the ability to lead the market in purchasing home loans—a market in which they clearly dominate. With the background information presented in the previous section, the question of why the overall goal levels are not set at or above the market levels can be addressed. Particularly important are why the special affordable goal level is set below the market range, and why the Low- and Moderate-Income Housing Goal is set only at the low end of the market range. One factor concerns the GSEs' performance. An analysis of their purchases by property type shows that they have 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 Tables 4.4 and 4.4b of Chapter IV, GSE mortgage purchases represented only 37-41 percent of single-family and multifamily rental units financed between 1999 and 2002 -- a figure much lower than their 61 percent market share for single-family owner-occupied properties. 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 falls 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.

[24] See, e.g., S. REP. at 34.

[25] S. REP. at 34.

[26] 12 U.S.C. 2901 et seq.

[27] See section 1335(3)(B).

[28] While leadership may be exhibited through the GSEs' introduction of innovative products, technology, and processes and through establishing 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 housing needs, as well as for underserved urban and rural areas.

In the overall conventional conforming mortgage market, rental units in single family properties and in multifamily properties are expected to represent approximately 37 percent of the market, 42 percent of the units that collateralize mortgages qualifying for the Low- and Moderate-Income Housing Goal, and 56 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, 32 percent of the GSEs' purchases meeting the Low- and Moderate-Income Housing Goal, and 44 percent of the GSEs' purchases meeting the Special Affordable Housing Goal.[29]

The continuing weakness in GSE purchases of mortgages on single-family rental and multifamily properties is a major factor explaining the shortfall between GSE performance and that of the primary mortgage market. For a variety of reasons discussed in the appendices to the Final GSE Rule, the single-family rental and multifamily market segments have been more difficult for the GSEs to penetrate than the single-family owner-occupied mortgage market, although, as noted above, the GSEs have been increasing their purchases in the multifamily market.[30] The GSEs will now have to make up gaps and lead in markets in which they can do well, while also increasing their presence in the single-family rental and multifamily rental markets. The approach taken in the final rule for staged increases in the goals until they are at the top of the estimated market range will enable the GSEs to take new initiatives in a correspondingly staged manner to achieve the goals each year.

g. Financial Capacity to Support All Types of Affordable Housing

A wide variety of quantitative and qualitative indicators demonstrate that the GSEs' have the financial strength to improve their affordable lending performance; Section G.2 of Appendix A of the GSE Rule reviews these factors in some detail. 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. And at the end of 2002, Fannie Mae ranked second among all American corporations in assets, and Freddie Mac ranked fourth.

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[29] These percentage shares are computed from Table 4.4 in Chapter IV. Note that B&C loans are excluded from these data.

[30] One particular area where the GSEs could play a greater role is in the mortgage market for single-family rental dwellings. These properties, containing 1-4 rental units, are an important source of housing for low- and moderate-income families, but the GSEs have not played a major role in this mortgage market. It is recognized that such properties, which are generally owned by "mom and pop" businesses, are not financed in the secondary market to the same extent as mortgages on one-unit owner-occupied properties. Single-family rental properties are very heterogeneous, making it more difficult to develop standardized underwriting standards for the secondary market. However, the GSEs can do more to play a leadership role in providing financing for such properties. They have increased their role in this market in the 2001-03 period, and the experience from that period should enable them to further step up their participation.

h. Need to Maintain the Sound Financial Condition of the GSEs

Based on the analysis reported in Section E of Chapter VI, the levels of the goals will not adversely affect the sound financial condition of the GSEs. The GSEs have earned more than reasonable returns on their goals-qualifying loans in the past, and there is no reason to believe that this will not continue. The return on equity for their goals-qualifying loans has been only slightly below that on their non-goals-qualifying loans. As discussed below, it is anticipated the GSEs will have to penetrate more deeply into the mortgage market to meet the housing goals; there appear to be many opportunities for the GSEs to increase their goals-qualifying purchases in the non-GSE portion of the market. As discussed in Chapters IV and VI, the GSEs have entered new market segments (such as the subprime market) in a very prudent manner and have used numerous techniques (e.g., mortgage scorecards, loss mitigation strategies) to control their credit risk on affordable loans. Continuing to take such initiatives will be required.

C.3. Impacts of the Housing Goals

This section and the following section continue the discussion of the rationale for the housing goals and home purchase subgoals by examining their likely impacts. The various impacts are examined in both qualitative and quantitative terms. The data and analysis concerning impacts also relate to the sensibility of the goals. Relevant information is provided throughout this section.

After some introductory remarks, this section provides a qualitative discussion of how the GSEs respond to the housing goals, referring to the types of activities the GSEs have implemented to meet past housing goal targets. In summary, the GSEs have introduced targeted programs, made adjustments to their underwriting standards, moved into new market areas (e.g., subprime lending), and employed various methods (e.g., partnerships with local governments and non-profit groups) to reach out to low-income borrowers and their communities—and as a result, they have improved their affordable lending performance relative to the primary market, as documented in Chapter IV. As reviewed below, the economics literature indicates that the types of programs the GSEs have introduced and the nature of their underwriting changes both have the potential to reduce well known barriers to homeownership, such as lack of downpayment and income and poor credit history. Thus, in that sense, the GSEs have been moving in the right direction, although, as discussed in Chapter IV, there remain questions about how far and how aggressive they have been in reaching out to lower income families and underserved neighborhoods.

The qualitative presentation of this section is followed in section C.4 by a quantitative analysis of characteristics of the housing and borrowers whose mortgages can be projected to be affected by the higher housing goals.

The likely impacts of higher goals on the GSEs will be similar to the activities that the GSEs have undertaken since the housing goals were put in place in 1993. These activities, such as underwriting changes and low-downpayment programs, focus on relaxing well-known barriers to homeownership. In fact, the 1990s saw a "revolution in affordable lending" characterized by new targeted programs and increased underwriting flexibility, introduced not only by the GSEs but also by primary lenders and private mortgage insurers. In general, many believe these programs had an impact on the recent growth in low-income mortgage lending and homeownership. In their analysis of the trends in homeownership rates by race and income, Bostic and Surrette find that demographic factors account for a substantial portion of the recent increase in homeownership rates for higher income households, but cannot account for increases among lower income households. They believe that this indicates that there is a potential explanatory role for recent changes in outreach by lending institutions, including the increased availability of affordable low down payment mortgages.[31] Listokin and Wyly state that the expansion of standardized, securitized affordable products in the past decade has "effectively carved out new frontiers for institutions interested in tapping new markets" (p. 605).[32] From their analysis of HMDA data, Quercia, McCarthy, and Wachter conclude that affordable lending initiatives of recent years may be having an impact, saying HMDA data "suggest that affordable home loan programs may be increasing the flow of funds to non-traditional borrowers and communities," although they caution that the literature on this subject "lacks an examination of the potential impacts of specific affordable lending products on the homeownership propensities of underserved populations."[33]

A general discussion of the benefits and market effects of the goals and subgoals are contained in Chapter IV for single-family owner properties and in Chapter V for multifamily and single-family rental properties. Some of the key insights from those discussions are summarized in the next few paragraphs. There are many strategies that the GSEs might adopt to meet the affordable housing goals. These include:

- **Increased flexibility in their mortgage underwriting guidelines.** The GSEs' guidelines are used by almost all mortgage originators, even if they do not plan to sell the mortgages they originate to the enterprises. Thus, with the exception of government-backed loans such as those insured by FHA or guaranteed by the Department of Veterans Affairs, almost all mortgage loans are written using these guidelines to evaluate mortgage applications. The GSEs were criticized in the early 1990s for "plain vanilla" underwriting guidelines oriented to "cookie cutter homes in the suburbs." Over the last decade Fannie Mae and Freddie Mac have liberalized their guidelines in response to earlier concerns of this nature, and these liberalizations played a significant role in the increase in affordable lending during the 1990s and the past few years. (See Section F.3 in Chapter IV.) But

[31] R. W. Bostic and B. J. Surrette, "Have the Doors Opened Wider? Trends In Homeownership Rates By Race and Income," *Journal of Real Estate Finance Economics*, Volume 23, pp. 411-434.
[32] David Listokin and Elvin K. Wyly, "Making New Mortgage Markets: Case Studies of Institutions, Home Buyers, and Communities," *Housing Policy Debate,* Volume 11, Issue 3, 2000, pp. 575-644.

[33] Roberto G. Quercia, George W. McCarthy, and Susan M. Wachter, "The Impacts of Affordable Lending Efforts on Homeownership Rates," *Journal of Housing Economics*, March 2003, pp. 29-59.

further modifications, consistent with maintenance of the safety and soundness of the GSEs, could be made to facilitate additional affordable lending.

- **Enhanced focus on lower down payment mortgages.** Research by HUD has shown that many of the lower-income loans purchased by the GSEs have relatively low loan-to-value ratios (that is, relatively high down payments.) (See Appendix A of Chapter IV.) A number of studies have shown that the greatest impediment to homeownership for lower income families, minority families, and families in underserved areas is not inability to afford the requisite monthly mortgage payments, but lack of sufficient resources to make the down payment. Thus although the enterprises' purchases of affordable mortgages with high down payments count toward the housing goals, they may not address the needs of many families and geographic areas targeted by the housing goals. As discussed in Sections F.3 and F.4 of Chapter IV, the GSEs have recently been introducing low-downpayment programs aimed at wealth-constrained borrowers.

- **Purchases of portfolios of seasoned mortgages.** All targeted mortgages purchased by the GSEs count toward the housing goals, whether such mortgages were originated in the same year or whether they are seasoned mortgages, originated in a year prior to the year of purchase. The GSEs' purchases of CRA-type loans from bank and thrift portfolios provide additional capital and liquidity for these institutions to re-invest in their local market. In some cases the GSEs have purchased large portfolios of seasoned mortgages in which high shares of the mortgages qualify for HUD's housing goals. (See Section F.6 of Chapter IV and Table A.11 of Appendix A of the Final Rule.) Such purchases are also attractive to the GSEs because of the existence of payment history data. Thus, some degree of emphasis on acquisitions of seasoned goal-qualifying mortgages would contribute toward achievement of the housing goals by the GSEs.

- **Increased role in the subprime mortgage market.** The GSEs have traditionally focused on the prime (or A) mortgage market, for borrowers with excellent credit histories. This has meant that otherwise qualified borrowers with less than excellent credit histories have been borrowing in the subprime mortgage market, where credit is much more expensive. In fact research by Freddie Mac has shown that some borrowers who could have qualified for prime loans have taken out mortgages at subprime rates. The percentage of borrowers in the subprime market who qualify for the various housing goals has consistently been higher than the corresponding percentage for prime borrowers. Thus an enhanced role for the GSEs in the subprime market would increase their performance on the housing goals, as well as reducing the cost of financing for subprime borrowers.. As explained in Section F.7 of Chapter IV, both enterprises have stepped up their presence in that market, but additional steps could be taken without endangering the GSEs' safety and soundness.

- **Further development of the GSEs' mortgage scoring systems.** The automated underwriting (AU) or mortgage scoring systems developed by Fannie Mae and

Freddie Mac have revolutionized the mortgage origination process and made it possible for lenders to process record application volume in the past few years. A Freddie Mac study reviewed in Section G of Chapter IV concluded that the increased risk predictiveness of automated underwriting systems can enable lenders and the GSEs to expand homeownership opportunities among underserved populations.[34]

- **Increased outreach programs and partnership efforts.** Both Fannie Mae and Freddie Mac have made significant efforts in recent years to take the initiative and become involved in developing new programs and products that benefit families targeted by the housing goals. They have implemented their programs through numerous partnership efforts with lenders, private mortgage insurers, local governments, and non-profit groups. These programs and partnership efforts are well documented in various GSE publications and in the Annual Housing Activity Reports submitted to HUD and Congress by the enterprises; they are summarized in Sections F.4 and F.5 of Chapter IV. The GSEs would now be in a position to evaluate the effectiveness of these initiatives in recent years and modify them as appropriate to further adapt their programs to meet the needs of borrowers and locations targeted by the housing goals and subgoals.

GSE Initiatives Consistent With Literature On Reducing Barriers.[35] The economics literature suggest that programs and underwriting changes such as those listed above have the potential to reduce well known barriers to homeownership, such as lack of downpayment and income and poor credit history. Thus, in that sense, the GSEs have been moving in the right direction under the housing goals. There is an extensive literature on barriers to homeownership that has focused attention on the obstacles posed by various borrower and property underwriting requirements used to assess borrower capacity and creditworthiness and a property's continued marketability to limit credit risk to an acceptable level. Underwriting requirements have generally been implemented as rules regarding minimum down payment and assets to close a loan, maximum expense-to-income qualifying ratios, satisfactory credit history, and satisfactory collateral. These underwriting rules, however crafted, have generally represented a major challenge for those having little or no wealth, lower income, weaker credit, or seeking to finance an atypical property. Moreover, lack of understanding about the mortgage process and racial discrimination pose additional barriers to homeownership.

[34] As discussed in Chapter IV, there are concerns, however, that some lower-income borrowers may be disadvantaged by automated underwriting systems if they have nontraditional credit histories. Both GSEs state that applications that do not qualify under their mortgage scoring systems are not necessarily rejected—rather, they are supposed to be referred for manual underwriting. But given the time and expense involved in manual underwriting, and the fact that fixed origination costs make up higher shares of targeted mortgages than mortgages for higher income borrowers, some observers have questioned how well this process works in practice, especially in record mortgage markets such as those of the past few years.

[35] Readers not interested in this brief review of the barriers literature may want proceed to the next section.

Insufficient savings to pay required up front down payment and closing costs has long been understood to be the single greatest obstacle to buying a home. Research studies by Linneman and Wachter (1989), Savage and Fronczek (1993), Savage (1997), Haurin and others (1997), Quercia and others (2002), and Listokin and others (2002) have consistently found a lack of sufficient wealth to pay down payment and closing costs is a significant limitation on the ability of renter households to become homeowners.[36] In general, these studies have found that a lack of wealth to meet down payment requirements is a much more important limitation on homeownership than a lack of income to meet limits on monthly payments. For example, Listokin and others (2002) found that 90.8 percent of renters could not afford to purchase a modestly priced home. Of these, 95.6 percent were constrained from buying this home by a lack of savings and 71.9 percent had incomes that were too low to support monthly mortgage payments and other housing costs. However, most of the income-constrained households also faced a wealth constraint, with only 4.4 percent of financially constrained households facing only an income constraint. Thus, about two-thirds of renters were limited by a lack of both income and wealth from being able to purchase their target home, while another quarter were limited solely by a lack of wealth. Less than 5 percent faced only an income constraint. Thus, the Listokin study and most other studies conclude that while greater underwriting flexibility is very helpful, some form of down payment assistance would be most effective at expanding homeownership.

In terms of relative importance as a barrier to increased homeownership, Quercia and others (2002) find that removing down payment requirements could increase homeownership rates by about 8 percentage points, while more moderate reductions in down payment requirements and relaxation of payment ratios would increase homeownership by about 3 percentage points. In both cases, gains are found to be slightly larger for Blacks and low-income households, thus contributing to a narrowing of homeownership gaps. This same study finds that a reduction in interest rates of 2 percentage points would increase homeownership rates by less than 1 percent overall, and have nearly no impact on homeownership among Blacks. This finding is consistent with other studies that find little impact from lower interest rates on the ability of households to qualify for a mortgage.

In keeping with these findings, Rosenthal (2002) also finds that the removal of credit barriers generally, including wealth and income limitations as well as problematic credit histories, would raise overall homeownership rates by about 4 percentage points. Homeownership gaps by race and income are projected to decrease as gains among

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[36] Peter D. Linneman and S.M. Wachter (1989) "The Impacts of Borrowing Constraints on Homeownership," *Journal of the American Real Estate and Urban Economics Association* 17:389-402. Howard Savage and Peter Fronczek (1993) "Who Cannot Afford to Buy a House in 1991," *Current Housing Reports*, U.S. Bureau of the Census. Howard Savage (1997) "Who Cannot Afford to Buy a House in 1993," *Current Housing Reports*, U.S. Bureau of the Census. Donald R. Haurin, Patric Hendershott, and Susan Wachter (1997) "Borrowing Constraints and Tenure Choice of Young Households," *Journal of Housing Research* 8:137-154. David Listokin, Elvin K. Wyly, Brian Schmitt, and Ioan Voicu (2002) "The Potential and Limitations of Mortgage Innovation in Fostering Homeownership in the United States," *Housing Policy Debate* 12(3):465-513.

Hispanics and "Other" minorities would be about 2 percentage points higher, while lower income households would have gains from 7 to 11 percentage points. Blacks, however, are projected to have smaller gains than average. Overall, the studies by Quercia and others (2002) and Rosenthal (2002) suggest that removing credit barriers could boost homeownership rates by 4 to 8 percentage points.[37]

However, Bradley and Zorn (1996) conducted focus group studies that found many renter households who were financially capable of becoming homeowners remained renters out of fear or lack of information about the lending process.[38] And, a study by Galster and others (1999) confirmed that a significant fraction of renter households appear attractive prospects for homeownership, with low credit risk and high probabilities of transitioning to homeowner status, but who nonetheless remain renters.[39] Moreover, the Listokin (2002) study found that 9.2 percent of renters could qualify to purchase a modestly priced home without any additional assistance and roughly half that number or 5 percent of renters could qualify without additional assistance to purchase the *target* home each renter family was individually estimated to choose. That percentage translates into a potential increase in the overall homeownership rate for all households of 1.3 percentage points were barriers of fear and lack of understanding or discrimination to be removed. Thus, the potential impact on homeownership rates of more affordable mortgage products could be evaluated against this baseline potential increase from standard mortgage underwriting.

Thus, the types of new program and outreach activities that the GSEs have been undertaking under the housing goals are appropriately aimed at barriers to homeownership. However, as discussed in Chapter IV, there remain questions about how far and how aggressive the GSEs have been in initiating programs and reaching out to lower income families and underserved neighborhoods.

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[37] Barakova et al. recently analyzed the effects of poor credit quality on homeownership. They conclude (p. 334) that financing constraints "continue to have an important impact on potential homebuyers," and in particular "wealth and credit quality based constraints significantly reduce the likelihood of whether individuals and households opt to own a home." While identifying poor credit history as a significant barrier, consistent with other work, they also find the lack of cash to be the major barrier to homeownership. Irina Barakova, Raphael W. Bostic, Paul S. Calem, and Susan M. Wachter, "Does Credit Quality Matter for Homeownership?" *Journal of Housing Economics*, December 2003, pp. 318-336.

[38] Donald S. Bradley and Peter Zorn (1996) "Fear of Homebuying: Why Financially Able Households May Avoid Homeownership," *Secondary Markets* 13(2):1, 24-30.

[39] George Galster, Laudan Aron, and William Reeder (1999) "Encouraging Mortgage Lending in 'Underserved' Areas: The Potential for Expanding Home Ownership in the US," *Housing Studies* 14(6):777-801 They estimated that approximately 9.6 percent or 2.7 million of renter households (excluding households of unrelated individuals) represented in the 1990 Survey of Income and Program Participation (SIPP) who remained renters over an 18-month period had estimated probabilities of transitioning to homeownership in excess of the median probability for renters who actually became homeowners over the same period while having no greater likelihood of default.

Additional Qualitative Impacts of the Goals. The literature reviewed above suggests that there is a substantial population of renters who meet GSE underwriting standards and might be inclined toward homeownership with the right kind of outreach that overcame their fears and misunderstanding. These households would constitute a net addition to the homeownership population with an attendant increase in the homeownership rate. In addition there are no doubt homebuyers who purchase homes in underserved areas with FHA or subprime financing who could with proper outreach benefit from a less costly GSE mortgage. These households could utilize the savings to finance a larger or better home. Moreover, there are some potential homebuyers that in the past would have had to use FHA to obtain some underwriting flexibility, such as a higher LTV or payment to income ratio, or delay their home purchase who could now use one of the GSE affordable lending programs. One may recall that each half point reduction in interest translates into a 6 to 8 percent increase in mortgaged funds for a given amount of income and every percentage point of income available for housing expense increases mortgaged funds by about 3 percent. Hence, a household who qualified for mortgage of $100,000 at 6.5 percent interest could qualify for an additional $16,000 with a percentage point reduction to 5.5 percent or an additional $10,700 with a relaxation of 3 percentage points in the payment to income ratio. Borrowers who have been paying higher interest rates in the non-GSE portion of the market would benefit from the low interest rates offered by the GSEs.

As noted above, the goals could have homeownership impacts with net additions obtained through greater outreach or accelerated transitions as well as lowering the cost and improving the quality of the homes attainable by both the net new homebuyers and those who would have otherwise utilized a more costly subprime or FHA mortgage product. While this section provides quantitative information on the likely impact of the goals and subgoals in terms of types of addition mortgages purchased by the GSEs, it is difficult to translate them into specific numbers. Despite the difficulty is coming to any precise quantification, it should be clear that the resulting impacts are nevertheless, real and significant.[40]

[40] While there are a number of studies that have examined the potential for increasing homeownership (see earlier discussion), there are few studies that have estimated the effectiveness of different policy approaches, largely due to the challenges of isolating program impacts in a market context. The economics literature on estimating the impacts of specific programs on homeownership is thin. Those studies that exist often do not find much impact, even for FHA's low down payment program (although this probably reflects more about the adequacy of the data and studies than it does about FHA's impact on homeownership). Goodman and Nichols (1997) analyzed the impact of FHA insurance on home ownership. They found (p. 197) that FHA insurance "increases the amount of housing that consumers can purchase and, for some consumers, reduces the cost of owning a given house, and, for sure, some households could not become owners without FHA." But they caution (p. 198) that the main effect on homeownership is "mostly to accelerate home purchase, not to enable it." A more recent study by Onder (2002) finds that the level of FHA activity is positively associated with homeownership rates across census tracts, but the impact is small. Monroe (2001) also concludes that FHA's market share is associated with higher homeownership rates but the magnitude of the impact is fairly small.

housing goal targets "have substantial impact" (p. 152)[41] Thus, rather than being a targeted policy tool such as cash grants for downpayments, the housing goals seek to encourage the GSEs to increase their outreach to lower-income families through underwriting flexibilities and new affordable product offerings. Through these means, access to low-cost mortgage funds is provided a greater number of to low-income families, although admittedly not in the form of a direct cash grant program, which researchers have concluded is the most efficient method for overcoming the wealth constraint that limits homeownership for many lower-income renters.

In setting the overall housing goals and the home purchase subgoals, HUD does not attempt to prescribe or micromanage the GSEs' mortgage purchase activities, either as to the types of mortgages they should buy to meet the goals and subgoals or the particular mortgage markets they should be involved in. These decisions are and should be made by the GSEs themselves. But, as described earlier, there are ample opportunities in the various portions of the mortgage market to purchase mortgages that would enhance the GSEs' goal performance. As also discussed in detail throughout Appendices A-C of the Final GSE Rule, increased purchases of mortgages on rental properties, whether these are single-family properties or multifamily properties, in general will enhance goals performance. And within the single-family owner occupied market, purchases of certain types of mortgages (e.g., first-time homebuyer, subprime, CRA-portfolio, manufactured homes) can make a major contribution to goal performance. This section presents the results from various simulation techniques, which can be used to generate estimates of GSE goal performance under different mortgage purchase scenarios.

The section presents several types of analyses to gauge the impacts of the both the home purchase subgoals and the overall housing goals. The past performances of the GSEs are compared with the final goal targets and the GSEs purchases under different future mortgage markets are estimated. While it is recognized there is some uncertainty with such analysis, it highlights the overall impacts of the goals and provides insights into how the GSEs might meet the new goals.

a. Subgoals Compared With Past Performance: Low-Mod Subgoal

This and the next two sections examine the past performance of the market and GSEs, as a means of providing a first indication of the impact of the new subgoal targets. Each of the three home purchase subgoals are discussed next, as summarized in Table 3.2b. Additional tables are also provided to compare the GSEs' past performance and the market's past performance for each of the home purchase subgoals. (See Tables 3.3a-3.5b, as discussed below.)

TABLE 3.2b

[41] Gerson M. Goldberg and John P. Harding, "Investment Characteristics of Low- and Moderate-Income Mortgage Loans," *Journal of Housing Economics*, September 2003, pp. 151-180.

Table 3.2b

Home Purchase Subgoals and 1999-2002 Performance

Subgoal	GSEs' Purchases 1999	2000	2001	2002	2003	Market (W/O B&C Loans) 1999	2000	2001	2002	2003
Low- and Moderate-Income Subgoal										
Fannie Mae	39.2%	40.1%	41.7%	43.6%	47.5%					
Freddie Mac	40.0%	41.7%	39.8%	42.1%	44.2%					
						44.0%	43.3%	41.6%	42.5%	45.6%
Underserved Areas Subgoal										
Fannie Mae	25.3%	29.0%	29.8%	32.3%	32.0%					
Freddie Mac	25.6%	27.3%	27.3%	31.7%	29.0%					
						30.2%	31.7%	30.7%	31.8%	32.5%
Special Affordable Subgoal										
Fannie Mae	12.5%	13.4%	14.7%	15.8%	17.7%					
Freddie Mac	12.8%	14.5%	13.9%	15.1%	16.2%					
						17.1%	16.8%	15.4%	15.4%	16.8%
Subgoals										
Low- and Moderate-Income	45%-47%									
Underserved Areas	32%-34%									
Special Affordable	17%-18%									

NOTE: Based on counting rules for 2005-2008, defined using 2000 Census data and geography, including metropolitan areas as defined by OMB on June 30, 2003.
Subgoals apply to metropolitan areas only.

C.4. Quantitative Analysis of the Housing Goals

This section provides a quantitative analysis (a) examining the projected baseline goals-qualifying shares for the GSEs under different assumptions about their purchase behavior; (b) comparing these baseline projections with the new goal targets for 2005-2008; (c) offering estimates (admittedly illustrative) of the additional purchases that the GSEs would have to make in order to erase any shortfall between their baseline performance and the year-specific goals and subgoals; and (d) showing the likely effects of increasing the housing goals and establishing subgoals on the characteristics of GSE purchases and on various subgroups such as first-time homebuyers. Estimates are provided of the impacts of the Department's proposals on groups including first-time homebuyers and minority families. As explained earlier, the analysis of the higher housing goals must also consider the ability of the GSEs to reach the goals. Therefore, information related to feasibility is also provided throughout this section. As noted above, baseline estimates of the GSEs' goals-qualifying shares (i.e., the share of their business qualifying for the low-mod, special affordable, and underserved areas goals) are provided for the years 2005-2008. These baseline estimates depend importantly (a) on the assumed goals-qualifying characteristics of the single-family-owner loans purchased by the GSEs (e.g., does one project that a GSE will purchase low-mod loans at its previous peak-performance rate, or at its average rate over the last 2-3 years); and (b) on the multifamily and single-family rental share of the GSEs' overall business. With respect to (b), an assumed larger rental share translates into higher baseline performance on the housing goals for the GSEs, and therefore smaller shortfalls from the new housing goal targets.

While it is difficult to predict the GSEs' exact strategy for meeting the goals, some additional-purchase numbers are generated that provide a sense of the overall magnitude of the GSEs' additional purchases. To gain further insight into the impacts of the new goals and subgoals, the additional purchases are categorized in section C.4 along interesting policy dimensions such as first-time homebuyer and minority status. However, there is no suggestion here that the additional GSE purchases automatically translate into additional homeowners. Rather, the GSEs' impact on the housing and mortgage markets is a wide ranging one—for example, providing both homebuyers and refinancing borrowers with lower interest rates than they otherwise could have obtained, increasing the access of families living in underserved neighborhoods to credit offered by mainstream lenders, allowing low-income families to qualify for home or a higher valued home, or to purchase a home in advance of their initial plans. With respect to the GSEs and market impacts, it is important to keep in mind the fact that they dominate the single-family mortgage market, which means their underwriting standards are immediately adopted by most primary lenders in the conventional conforming market, and their new product offerings are offered by major lenders in that market. This is the perception among several researchers. Listokin and Wyly (2000) note that "most lenders involved in underserved markets tailor underwriting to government-sponsored enterprise (GSE) guidelines" (604). Goldberg and Harding, who studied the investment characteristics of low- and moderate-income mortgage loans, note that because the GSEs purchase or guarantee more than half of all new conventional mortgages originated in the U.S., the

The target for the low-mod home purchase subgoal is 45 percent for 2005, 46 percent for 2006, and 47 percent for 2007 and 2008. The purpose of this subgoal is to encourage the GSEs to improve their acquisitions of home purchase loans for lower-income families and first-time homebuyers who are expected to enter the homeownership market over the next few years.

Table Formats. Tables 3.3a and 3.3b provide basic information on both the GSEs' low-mod performance and the primary market's low-mod performance for the years 1999 to 2003. Since the same format will be followed for the other housing subgoals, several points can made about the information in these tables:

TABLES 3.3a AND 3.3b

Average Performance Data. In addition to individual year data, various averages of annual performance are provided at the bottom of Table 3.3a (1999-2003, 2001-2003, and 2002-2003); these averages provide a useful context for examining the feasibility of the subgoals and the degree to which they call for performance that is above past market levels. As will become clear below, Fannie Mae and Freddie Mac have shown different past performances, which means that the subgoal targets will appear to have different impacts on these two institutions.

Definitions of Primary Market. HUD's basic market definition is the conventional conforming market without B&C loans; in other words, the A-minus loans in the subprime market are included in the market definition but the more risky B&C portion is not included (see Appendix D of the final rule for further discussion of this). In its report for Freddie Mac, ICF indicated that small loans (those less than $15,000) should be excluded from any analysis that dealt with loans that might be available for purchase by the GSEs. Therefore, data are provided in Tables 3.3a and 3.3b for (a) the market without B&C loans and (b) the market without both B&C and small loans less than $15,000. As shown in Table 3.3a, dropping small loans reduces the low-mod share of the conventional conforming market by about one-half percentage point. For comparison purposes, market percentages are also presented in Table 3.3a for a third market definition -- one that excludes manufactured housing loans (as well as B&C loans and small loans). However, the analysis below will focus on the first two market definitions.

Subgoal versus Market and GSE Performance. Table 3.3b provides a detailed comparison of each of the low-mod subgoals (45, 46, and 47 percent) first with the average market and GSE performance for three recent time periods -- 1999-2003, 2001-2003, and 2002-2003 -- and second with the peak performance of the market and each GSE (i.e., the year of highest past performance for each group). This table provides the clearest picture of how much the low-mod subgoal targets move the GSEs above past market levels and how much of a stretch each subgoal will be for each GSE (as compared with that GSE's past performance).

Table 3.3a

Low- and Moderate Income Home Purchase Subgoals

	2005	2006	2007	2008
Subgoals	45%	46%	47%	47%
			Conventional Conforming Market	
Low-Mod (%)	Fannie Mae	Freddie Mac	Market W/O B&C	Market W/O B&C and LT $15,000
1999	39.2	40.0	44.0	43.5
2000	40.1	41.7	43.3	42.6
2001	41.7	39.8	41.6	41.1
2002	43.6	42.1	42.5	42.1
2003	47.5	44.2	45.6	45.2
Weighted Average				
1999-2003	42.9	41.5	43.5	43.0
2001-2003	44.5	41.9	43.4	43.0
Unweighted Average				
1999-2003	42.4	41.6	43.4	42.9
2001-2003	44.3	42.0	43.2	42.8
2002-2003	45.6	43.2	44.1	43.7

NOTE: Based on counting rules for 2005-2008, defined using 2000 Census data and geography, including metropolitan areas as defined by OMB on June 30, 2003.

Table 3.3b

Low- and Moderate-Income: Comparison of Market and GSE Performance With Home Purchase Subgoals, 1999-2003

	Low-Mod Performance	Subgoal Minus Market and GSE Performance		
		45	46	47
1999-2003				
1. Market W/O B&C	43.4	1.6	2.6	3.6
2. Market W/O B&C and W/O Small Loans	42.9	2.1	3.1	4.1
3. Fannie Mae	42.4	2.6	3.6	4.6
4. Freddie Mac	41.6	3.4	4.4	5.4
2001-2003				
1. Market W/O B&C	43.2	1.8	2.8	3.8
2. Market W/O B&C and W/O Small Loans	42.8	2.2	3.2	4.2
3. Fannie Mae	44.3	0.7	1.7	2.7
4. Freddie Mac	42.0	3.0	4.0	5.0
2002-2003				
1. Market W/O B&C	44.1	0.9	1.9	2.9
2. Market W/O B&C and W/O Small Loans	43.7	1.3	2.3	3.3
3. Fannie Mae	45.6	-0.6	0.4	1.4
4. Freddie Mac	43.2	1.8	2.8	3.8
Peak Performance				
1. Market W/O B&C	45.6	-0.6	0.4	1.4
2. Market W/O B&C and W/O Small Loans	45.2	-0.2	0.8	1.8
3. Fannie Mae	47.5	-2.5	-1.5	-0.5
4. Freddie Mac	44.2	0.8	1.8	2.8

Projected 2000-Based Data. As with the summary Table 3.2b, the individual subgoal Tables 3.3a-3.5b are based on projected data that incorporates both 2000 Census geography and the new OMB definitions. Thus, the goals-qualifying percentages in this chapter differ from those reported in Chapter IV of this regulatory analysis, which are historical, 1990-Census-based percentages. HUD had to reapportion the data for the years prior to 2003. For 2003, both HMDA and GSE data were defined in terms of 2000 Census geography, so no reapportionment was necessary; for this reason, the 2003 data are probably the most accurate.

With these basics, the results for the low-mod subgoal can now be briefly summarized as follows: (Readers are referred to Tables 3.3a and 3.3b for the details.)

Low-Mod Subgoals Compared With Market. The 45-percent subgoal for the first year (2005) is approximately two percentage points above 1999-2003 and 2001-2003 average market performance, one percentage point above 2002-2003 average market performance, and 0.6 percent (market without B&C loans) to 0.2 percent (market without both B&C and small loans) below peak market performance. The 46-percent subgoal for 2006 would add one percentage point to these comparisons, while the 47-percent subgoal for 2007 and 2008 would add two percentage points. For example, the 47-percent subgoal is approximately three percentage points above 2002-2003 average market performance, and 1.4 percent (market without B&C loans) to 1.8 percent (market without both B&C and small loans) above peak market performance.

Low-Mod Subgoals Compared With Past Freddie Mac Performance. To reach the 45-percent 2005 subgoal, Freddie Mac would have to improve its performance by 3.0 percentage points over its 2001-2003 average low-mod performance of 42.0 percent, by 1.8 percentage points over its 2002-2003 average low-mod performance of 43.2 percent, and by 0.8 percent over its previous peak performance of 44.2 percent in 2003. To reach the 47-percent subgoal, Freddie Mac would have to improve its performance by 3.8 percentage points over its 2002-2003 average low-mod performance, and by 2.8 percent over its previous peak performance.

Low-Mod Subgoals Compared With Past Fannie Mae Performance. To reach the 45-percent 2005 subgoal, Fannie Mae would have to improve its performance by 0.7 percentage points over its 2001-2003 average low-mod performance of 44.3 percent; Fannie Mae would meet the 45-percent subgoal based on its 2002-2003 average low-mod performance of 45.6 percent and its previous peak low-mod performance of 47.5 percent in 2003. To reach the 47-percent subgoal, Fannie Mae would have to improve its performance by 2.7 percent over its 2001-2003 average performance and by 1.4 percentage points over its 2002-2003 average performance; Fannie Mae would meet the 47-percent subgoal based on its previous peak performance of 47.5 percent in 2003.

The low-mod subgoal targets will be more challenging for Freddie Mac than Fannie Mae. The type of improvement needed to meet the new low-mod subgoal targets was demonstrated by Fannie Mae during 2001-2003, as Fannie Mae increased its low-mod purchases from 40.1 percent of its single-family-owner business in 2000 to 43.6 percent in 2002 to 47.5 percent in 2003, as shown in Table 3.3a. The approach taken is for the GSEs to obtain their leadership position by staged increases in the subgoals; this will enable the GSEs to take new initiatives in a correspondingly staged manner to achieve the new subgoals each year. Thus, the increases in the housing subgoals are sequenced so that the GSEs can gain experience as they improve and move toward the new higher subgoal targets.

b. Subgoals Compared With Past Performance: Special Affordable Subgoal

The target for the home purchase subgoal for special affordable loans is 17 percent for 2005 and 2006 and 18 percent for 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. The main points are as follows: (Readers are referred to Tables 3.4a and 3.4b for the details.)

TABLES 3.4a AND 3.4b

<u>Special affordable Subgoals Compared With Market.</u> The 17-percent subgoal for the first year (2005) is approximately one percentage point above the 1999-2003, 2001-2003, and 2002-2003 average market performance. The 17-percent subgoal is at the previous peak market performance (the 1999, 2000, and 2003 markets without B&C loans were about 17 percent) or slightly below the previous peak market performance (based on 2003 market without both B&C and small loans). The 18-percent subgoal for 2007 and 2008 would add one percentage point to these figures. Thus, the 18-percent subgoal is approximately two percentage points above the 1999-2003, 2001-2003, and 2002-2003 average market performance of approximately 16 percent. The 18-percent subgoal is one percentage point above the previous peak market performance (the 1999, 2000, and 2003 markets without B&C loans were about 17 percent) or 1.5 percentage points above the previous peak market performance based on the 2003 market without both B&C and small loans.

<u>Special Affordable Subgoals Compared With Past Freddie Mac Performance.</u> To reach the 17-percent 2005 subgoal, Freddie Mac would have to improve its performance by 1.9 percentage points over its 2001-2003 average special affordable performance of 15.1 percent, by 1.3 percentage points over its 2002-2003 average special affordable performance of 15.7 percent, and by 0.8 percent over its previous peak performance of 16.2 percent in 2003. To reach the 18-percent subgoal, Freddie Mac would have to improve its performance by 2.9

Table 3.4a

Special Affordable Home Purchase Subgoals

	2005	2006	2007	2008
Subgoals	17%	17%	18%	18%
			Conventional Conforming Market	
Special Affordable (%)	Fannie Mae	Freddie Mac	Market W/O B&C	Market W/O B&C and LT $15,000
1999	12.5	12.8	17.1	16.6
2000	13.4	14.5	16.8	16.2
2001	14.7	13.9	15.4	15.1
2002	15.8	15.1	15.4	15.2
2003	17.7	16.2	16.8	16.5
Weighted Average				
1999-2003	15.1	14.5	16.3	15.9
2001-2003	16.2	15.0	15.9	15.6
Unweighted Average				
1999-2003	14.8	14.5	16.3	15.9
2001-2003	16.1	15.1	15.9	15.6
2002-2003	16.8	15.7	16.1	15.9

NOTE: Based on counting rules for 2005-2008, defined using 2000 Census data and geography, including metropolitan areas as defined by OMB on June 30, 2003.

Table 3.4b

Special Affordable:
Comparison of Market and GSE Performance With Home Purchase Subgoals, 1999-2003

	Special Affordable Performance	Subgoal Minus Market and GSE Performance	
		17	18
1999-2003			
1. Market W/O B&C	16.3	0.7	1.7
2. Market W/O B&C and W/O Small Loans	15.9	1.1	2.1
3. Fannie Mae	14.8	2.2	3.2
4. Freddie Mac	14.5	2.5	3.5
2001-2003			
1. Market W/O B&C	15.9	1.1	2.1
2. Market W/O B&C and W/O Small Loans	15.6	1.4	2.4
3. Fannie Mae	16.1	0.9	1.9
4. Freddie Mac	15.1	1.9	2.9
2002-2003			
1. Market W/O B&C	16.1	0.9	1.9
2. Market W/O B&C and W/O Small Loans	15.9	1.1	2.1
3. Fannie Mae	16.8	0.2	1.2
4. Freddie Mac	15.7	1.3	2.3
Peak Performance			
1. Market W/O B&C	17.1	-0.1	0.9
2. Market W/O B&C and W/O Small Loans	16.6	0.4	1.4
3. Fannie Mae	17.7	-0.7	0.3
4. Freddie Mac	16.2	0.8	1.8

percentage points over its 2001-2003 average special affordable performance, 2.3 percent over its 2002-2003 average performance, and by about 1.8 percent over its previous peak performance.

Special affordable Subgoals Compared With Past Fannie Mae Performance. To reach the 17-percent 2005 subgoal, Fannie Mae would have to improve its performance by 0.9 percentage points over its 2001-2003 average special affordable performance of 16.1 percent; Fannie Mae would essentially meet the 17-percent subgoal based on its 2002-2003 average special affordable performance of 16.8 percent and would surpass the 17-percent subgoal based on its previous peak special affordable performance of 17.7 percent in 2003. To reach the 18-percent subgoal, Fannie Mae would have to improve its performance by 1.9 percent over its 2001-2003 average performance and by 1.2 percentage points over its 2002-2003 average performance; Fannie Mae would meet the 18-percent subgoal based on its previous peak performance of 17.7 percent in 2003.

As with the low-mod subgoal, the special affordable subgoal targets will be more challenging for Freddie Mac than Fannie Mae. But again, the type of improvement needed to meet the new special affordable subgoal targets was demonstrated by Fannie Mae during 2001-2003, as Fannie Mae increased its special affordable purchases from 13.4 percent of its single-family-owner business in 2000 to 15.8 percent in 2002 to 17.7 percent in 2003, as shown in Table 3.4a. This subgoal is designed to encourage Freddie Mac and Freddie Mac to lead the special affordable market. As noted above for the Low- and Moderate-Income Housing Goal, the approach taken is for the GSEs to obtain their leadership position by staged increases in the subgoals to enable the GSEs to gain experience as they improve and move toward the new higher subgoal targets.

c. Subgoals Compared With Past Performance: Underserved Areas Subgoal

The target for the home purchase subgoal for underserved areas is 32 percent for 2005, 33 percent for 2006 and 2007, and 34 percent for 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.[42] The

[42] 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 explained in Appendix B of the proposed GSE Rule, the 2000-based definition of underserved areas includes 5,372 more census tracts in metropolitan areas than the 1990-based definition, which means the GSE-market comparisons had 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. (Since 2003 HMDA and GSE data were gathered in terms of 2000 Census geography, no apportionment was required for that year.) Switching to the 2000-based tracts increases the underserved area share of market originations by about five percentage points. Between 1999 and 2002, 31.4 percent of mortgage originations (without B&C loans) were originated in underserved tracts based on 2000 geography, compared with 25.2 percent based on 1990 geography. As shown in Table B.8 of Appendix B of the Final Rule, the underserved areas share of each GSE's purchases also rises by

following points can be made about the data presented in Tables 3.5a and 3.5b for the underserved areas subgoal:

TABLES 3.5a AND 3.5b

Underserved Areas Subgoals Compared With Market. The 32-percent subgoal for the first year (2005) is approximately one percentage point above 1999-2003 and 2001-2003 average market performance (based on the market defined without B&C and small loans) and approximately at the 2002-2003 average market performance and the previous peak market performance. The 33-percent subgoal for 2006 would add one percentage point to these comparisons, while the 34-percent subgoal for 2007 and 2008 would add two percentage points. For example, the 34-percent subgoal is approximately three percentage points above both 1999-2003 and 2001-2003 average market performance, 1.8 percent (market without B&C loans) to 2.4 percent (market without both B&C and small loans) above 2002-2003 average market performance, and 1.5 percent (market without B&C loans) to 1.8 percent (market without both B&C and small loans) the market's previous peak performance in 2003.

Underserved Areas Subgoals Compared With Past Freddie Mac Performance. To reach the 32-percent 2005 subgoal, Freddie Mac would have to improve its performance by 2.7 percentage points over its 2001-2003 average underserved areas performance of 29.3 percent, by 1.6 percentage points over its 2002-2003 average underserved areas performance of 30.4 percent, and by 0.3 percent over its previous peak performance of 31.7 percent in 2002. To reach the 34-percent subgoal, Freddie Mac would have to improve its performance by 3.6 percentage points over its 2002-2003 average underserved areas performance, and by 2.3 percent over its previous peak performance. Notice in Table 3.5a that Freddie Mac's performance jumped from 27.3 percent in 2001 to 31.7 percent in 2002 only to then fall back to 29.0 percent in 2003. Thus, the 32-percent subgoal for 2005 is three percentage points above Freddie Mac's most recent experience (29.0 percent). However, as noted above, Freddie Mac's 31.7-percent performance in 2002 is only 0.3 percentage points below the 32-percent subgoal for 2005.

Underserved Areas Subgoals Compared With Past Fannie Mae Performance. To reach the 32-percent 2005 subgoal, Fannie Mae would have to improve its performance by 0.6 percentage points over its 2001-2003 average underserved areas performance of 31.4 percent; Fannie Mae would meet the 32-percent subgoal based on its 2002-2003 average underserved areas performance of 32.2 percent and its previous peak underserved areas performance of 32.3 percent in 2002. To reach the 34-percent subgoal, Fannie Mae would have to improve its performance by 2.6 percent over its 2001-2003 average performance, by 1.8

approximately five 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.

Table 3.5a

Underserved Areas Home Purchase Subgoals

	2005	2006	2007	2008
Subgoals	32%	33%	33%	34%
			Conventional Conforming Market	
Underserved Areas (%)	Fannie Mae	Freddie Mac	Market W/O B&C	Market W/O B&C and LT $15,000
1999	25.3	25.6	30.2	29.8
2000	29.0	27.3	31.7	31.3
2001	29.8	27.3	30.7	30.3
2002	32.3	31.7	31.8	30.9
2003	32.0	29.0	32.5	32.2
Weighted Average				
1999-2003	30.0	28.3	31.4	31.0
2001-2003	31.4	29.4	31.7	31.2
Unweighted Average				
1999-2003	29.7	28.2	31.4	30.9
2001-2003	31.4	29.3	31.7	31.1
2002-2003	32.2	30.4	32.2	31.6

NOTE: Based on counting rules for 2005-2008, defined using 2000 Census data and geography, including metropolitan areas as defined by OMB on June 30, 2003.

Table 3.5b

Underserved Areas:
Comparison of Market and GSE Performance With Home Purchase Subgoals, 1999-2003

	Underserved Areas Performance	Subgoal Minus Market and GSE Performance		
		32	33	34
1999-2003				
1. Market W/O B&C	31.4	0.6	1.6	2.6
2. Market W/O B&C and W/O Small Loans	30.9	1.1	2.1	3.1
3. Fannie Mae	29.7	2.3	3.3	4.3
4. Freddie Mac	28.2	3.8	4.8	5.8
2001-2003				
1. Market W/O B&C	31.7	0.3	1.3	2.3
2. Market W/O B&C and W/O Small Loans	31.1	0.9	1.9	2.9
3. Fannie Mae	31.4	0.6	1.6	2.6
4. Freddie Mac	29.3	2.7	3.7	4.7
2002-2003				
1. Market W/O B&C	32.2	-0.2	0.8	1.8
2. Market W/O B&C and W/O Small Loans	31.6	0.4	1.4	2.4
3. Fannie Mae	32.2	-0.2	0.8	1.8
4. Freddie Mac	30.4	1.6	2.6	3.6
Peak Performance				
1. Market W/O B&C	32.5	-0.5	0.5	1.5
2. Market W/O B&C and W/O Small Loans	32.2	-0.2	0.8	1.8
3. Fannie Mae	32.3	-0.3	0.7	1.7
4. Freddie Mac	31.7	0.3	1.3	2.3

percentage points over its 2002-2003 average performance, and by 1.7 percent over its previous peak performance of 32.3 percent in 2003.

As with the other two home purchase subgoals, the underserved areas subgoal targets will be more challenging for Freddie Mac than Fannie Mae, particularly given Freddie Mac's low performance (29.0 percent) during the most recent year (2003). Again, the type of improvement needed to meet the new underserved areas subgoal targets was demonstrated by Fannie Mae during 2001-2003, as Fannie Mae increased its underserved areas purchases from 29.0 percent of its single-family-owner business in 2000 to approximately 32 percent in both 2002 and 2003. As noted above for the low-mod and special affordable subgoals, staged increases in the underserved areas subgoal enable the GSEs to obtain their leadership position by gaining experience as they improve and move toward the new higher subgoal targets.

d. Additional Purchases Under the Home Purchase Subgoals—A First Look

The first step in gauging the impact of the new housing goals and subgoals is to determine their impact on the magnitude and characteristics of the mortgages purchased by the GSEs. To begin the impact analysis, this section estimates the additional goals-qualifying home purchase loans that would have been purchased by the GSEs assuming that the new home purchase subgoals had been in effect between 1999 and 2002. While this analysis is rather straightforward,[43] it does provide a sense of the overall magnitudes involved and the types of borrowers that would have benefited if the home purchase goals had been in effect. For this purpose, the 2005 goals are taken as an example.

For each of the three subgoal categories, the GSEs' goals-qualifying purchases during the 1999-2002 period fell short of what was needed to meet the new home purchase subgoal (see above discussion). This analysis took the GSEs' actual purchases of home mortgages during the 1999-to-2002 period as a baseline, and then computed the additional purchases of goals-qualifying home mortgages that would have been needed for each GSE to meet the percentage target for each of the home purchase subgoals.[44] The results of this exercise are presented in Table 3.6.

[43] The analysis does not consider the effect of the home purchase subgoals on the GSEs' goals-qualifying purchases of single-family refinance loans, single-rental loans, and multifamily loans; in other words, if the home purchase subgoals had been in effect during the 1999-2002 period, the GSEs might have reduced their goals-qualifying purchases in these other sectors (given the level of the overall goals during this period). On the other hand, Chapter 6 reports that the GSEs have earned relatively high returns on equity from their goals-qualifying purchases, which suggests the impact on the other sectors may have been small. Section C.4.d below presents a projection analysis that considers the various interactions of the home purchase subgoals with goals-qualifying purchases in other sectors.

[44] The methodology for estimating the number of additional purchases for both GSEs' for the 1999 to 2002 period is demonstrate using Freddie Mac's home purchase loans in 1999. Two key features of this analysis include (a) accounting for the increase in the denominator resulting from the additional purchases and (b) accounting for the overlaps that occur when loans qualify for more than one goal. Freddie Mac's 1999 baseline (i.e., its home purchase loans for 1999) is 653,218 loans of which 12.8 percent qualified for the special affordable subgoal, 40.0 percent qualified for the low-mod subgoal, and 26.1 percent qualified for the underserved areas subgoal. A hypothetical increase in Freddie Mac's baseline loans in 1999 is assumed to meet the proposed three subgoals. Additional purchases for each subgoal are further allocated according

TABLE 3.6

If the 2005 subgoals had been in effect since 1999, it is estimated that the GSEs together would have purchased 347,193 additional special affordable home purchase loans, 651,736 additional low-mod home purchase loans, and 491,895 additional underserved areas home purchase loans. Accounting for the overlap among the three subgoal categories—e.g., all special affordable loans qualify as a low-mod loan, a certain percentage of special affordable loans qualify as underserved, and so on, the net number of subgoals-qualifying loans is 813,371—439,358 purchased by Fannie Mae and 374,013 purchased by Freddie Mac.[45] Although Freddie Mac's total purchases during this period make up 41 percent of the GSEs' total purchases, Freddie Mac ends up purchasing 46 percent of goals-qualifying loans because it has larger shortfalls in performance than Fannie Mae, which must be made up with additional goals-qualifying purchases. This pattern will show up throughout the analysis in this section.

The figure of 813,371 represents a large number of goals-qualifying purchases. This large number reflects the fact that the GSEs are huge corporations that account for a large share of the conventional conforming market. As noted earlier, one of the advantages of housing goals as a policy tool, is that the goals influence the two firms whose purchase policies dominate the mortgage market. The next question in the impact analysis concerns the characteristics of these additional goals-qualifying loans—do the characteristics of the loans purchased suggest that the GSEs are solving problems of credit access and extending homeownership opportunities?

As background, consider Table 3.7, which examines special affordable, low-mod, and underserved area loans along a number of dimensions (such as first-time homebuyer and minority status) related to credit access and homeownership opportunities. Not surprisingly, these results show that, compared with a non-goals-qualifying loan, a goals-qualifying loan is more likely to be a first-time homebuyer loan, or a minority loan, or a low-downpayment loan. For example, in 2001, 42 percent of Special Affordable loan

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to historical patterns across overlap categories. For example, of the 45,830 additional special affordable loans needed to meet the 17 percent special affordable subgoal, 17,967 loans qualify as only special affordable while the remaining 27,863 loans qualify for both the special affordable and the underserved areas subgoal. Of the 81,352 additional low-mod loans needed to meet the 45 percent low-mod subgoal, in addition to the 45,830 loans just described, the remaining 35,523 loans that qualify as low-mod but not special affordable are allocated as follows: 18,451 qualify for the low-mod and underserved areas subgoal and 17,072 qualify only as low-mod loans. There are 73,165 additional loans purchased to meet the underserved areas subgoal. In addition to the loans already qualifying under the special affordable and low-mod subgoals, the remaining 26,851 loans purchased in underserved areas are for borrowers with incomes greater than the area median.

[45] The net additional purchases are less than the sum of the loans needed to meet the individual subgoals. The difference is accounted for by the following overlap categories: all loans qualifying for the special affordable subgoal also qualify for the low- and moderate-income subgoal; loans to very-low-income borrowers in targeted areas qualify for both the special affordable and underserved areas subgoals, and similarly, loans to low- and moderate-income borrowers in targeted areas qualify for the low- and moderate income and underserved areas subgoals.

Table 3.6

Hypothetical Example: Additional GSE Purchases Applying Subgoals to 1999-2002 Period Both GSEs

	Additional First-Time Homebuyers Purchases				All Additional Purchases			
	All	90%+ LTV*	95%+ LTV	Minority	All	90%+ LTV*	95%+ LTV	Minority
Special Affordable	146,170	72,803	40,923	53,239	347,193	124,599	55,975	96,356
Low- Mod	248,032	119,387	60,486	83,175	651,736	225,962	87,213	165,136
Underserved Areas	190,211	97,620	48,669	85,227	491,895	189,865	69,251	176,824
Additional Purchases**	293,686	137,475	65,072	101,569	813,371	274,816	95,835	216,713

*Includes 95 percent and greater LTVs.

**The net additional purchases are less than the sum of the loans needed to meet the individual subgoals. The difference is accounted for by the following overlap categories: all loans qualifying for the special affordable subgoal also qualify for the low- and moderate-income subgoal; loans to very-low-income borrowers in targeted areas qualify for both the special affordable and underserved areas subgoals, and similarly, loans to low- and moderate-income borrowers in targeted areas qualify for the low- and moderate income and underserved areas subgoals.

Explanation: This hypothetical example provides estimates of the GSEs additional purchases if the home purchase subgoals had been in effect for the years 1999 to 2002. The column "All" under the heading "All Purchases" indicates the GSEs' shortfalls for each of the subgoal individually as well as the net number of home purchase loans. These shortfalls are a combination of the additional purchases computed for each GSE for each year between 1999 and 2002. For a given year for a given GSE, this analysis took the GSEs' actual purchases of home mortgages as a baseline, and then computed the additional purchases of goals-qualifying home mortgages that would have been needed for each GSE to meet the percentage target for each of the home purchase subgoals. Two key features of the model include (a) accounting for the increase in the denominator resulting from the additional purchases and (b) accounting for the overlaps that occur when loans qualify for more than one goal. A hypothetical increase in the baseline in each year is assumed to meet the proposed three subgoals. These additional purchases are further allocated by subgoal across the other colums in this table according to historical patterns.

purchases were from first-time homebuyers compared to 27 percent for all loan purchases. Twelve percent of Low- Moderate-Income loans had an LTV greater than 95 percent, compared to only 7 percent for all loans. Thirty-six percent of loan purchases from Underserved Areas were from minority homebuyers compared to 20 percent from all loan purchases.[46, 47]

TABLE 3.7

Table 3.8 shows credit score distributions for a sample of GSE acquired home purchase loans in 12 large metropolitan areas between the years 1998 and 2000.[48] These data illustrate the patterns of credit scores for the three metropolitan home purchase loan subgoals. For example, 14.3 percent of special affordable loan purchases had a FICO score below 620 compared to 9.8 percent for all loan purchases. Low-mod and underserved area loans also show a higher percentage of low FICO scores of 12.7 percent and 14.2 percent, respectively. Goals-qualifying loan purchases also have relatively fewer FICO scores above 720. While 60.7 percent of all loans purchased had a FICO score greater than 720, only 54.9 percent of special affordable, 57.1 percent of low-mod, and 51.2 percent of underserved area loans had high FICO scores. However, these differentials do not appear to be particularly large, and over half of the loans in each goals-qualifying category had FICO scores in excess of 720.[49]

TABLE 3.8

The data in Tables 3.7 and 3.8, while showing that goals-qualifying loans are more targeted to important subgroups than are non-goals-qualifying loans, also raise some questions about the impact of the goals-qualifying purchases of the GSEs. For example, why do a large percentage of the goals-qualifying loans purchased by the GSEs have such large downpayments. The point that stands out is that one cannot assume that all the goals-qualifying purchases of the GSEs are necessarily expanding credit access and extending homeownership opportunities; rather, many of the families that qualify for

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[46] Note that the percentages for the more broadly defined low- and moderate-income category are closer to those of all loans purchased, as compared with the percentages for the special affordable and underserved areas categories.

[47] 2001 goal performance is cited because it reflects more closely the higher levels of loan purchases consistent with having to purchase additional goals-qualifying loans.

[48] The distribution of goals purchases across FICO scores is based on the FICO score distribution of GSE purchased loans between 1998 and 2000 for 12 Metropolitan Areas, as shown in Table 3.8. These data are "illustrative" because of the uncertainty of the representativeness of the sample. However, they are useful in illustrating patterns of FICO scores by goal category. They were obtained by merging Experian data with HMDA data for 12 large metropolitan areas. It is not clear whether this distribution reflects the GSEs' overall purchases. Therefore these data should be interpreted cautiously. In addition, it is known that Experian FICO scores tend to be lower than FICO scores generated by Trans Union and Equifax.

[49] These patterns could be due to the limited sample, but that is unknown. The issue of the credit scores on GSE loans is an area that needs further study, but unfortunately research has been hampered by lack of available data on credit scores.

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Table 3.7
Housing Goals by Borrower/Loan Characteristics
Home Purchase Loans in Metropolitan Areas
Both GSEs

	2001			
	First-Time Homebuyers	Minorities	Over 90% LTV*	Over 95% LTV
Special Affordable	41.7% **	27.3%	35.5%	15.9%
Low- and Moderate-Income	35.5%	22.2%	33.0%	11.8%
Underserved Areas	36.3%	35.5%	37.1%	12.5%
Total	27.4%	19.5%	27.3%	6.8%

	2002			
	First-Time Homebuyers	Minorities	Over 90% LTV*	Over 95% LTV
Special Affordable	36.3%	27.0%	32.4%	12.9%
Low- and Moderate-Income	32.2%	23.4%	30.6%	10.3%
Underserved Areas	32.4%	37.1%	33.4%	10.9%
Total	26.0%	21.5%	25.4%	6.7%

* Includes 95 percent and greater Loan-to-Value Ratios (LTVs).

** Interpreted as follows: 41.7% of special affordable home purchase loans purchased by the GSEs in metropolitan areas during 2001 were first-time homebuyer loans (compared with 27.4% of all home purchase loans).

Table 3.8
Illustrative Example: Housing Goals by Credit Scores for GSE Purchases in 12 Metropolitan Areas, 1998 - 2000
Both GSEs

	FICO Scores				
	0 - 620	621 - 660	661 - 720	721 +	Total
Special Affordable	14.3%	8.5%	22.2%	54.9%	100.0%
Low- and Moderate-Income	11.7%	8.1%	22.2%	58.1%	100.0%
Underserved Areas	14.2%	9.6%	25.0%	51.2%	100.0%
Total GSE Purchases	9.8%	7.5%	22.1%	60.7%	100.0%

NOTES: These data are referred to as "illustrative" because of the uncertainty of the representativeness of the sample. However, they are useful for illustrating patterns of FICO scores by goal category. They were obtained by merging Experian data with HMDA data for 12 large metropolitan areas; the GSE identifier in HMDA was used to identify GSE loans. It is not clear whether this distribution reflects GSE overall purchases in these metropolitan areas or in the nation as a whole. Therefore, these data should be interpreted cautiously. In addition, it is known that Experian FICO scores tend to be lower than FICO scores generated by Trans Union and Equifax. The data includes only home purchase loans.

the housing goals do not appear to be constrained in any way.[50] Thus, in examining the impacts of the housing goals, it is important to go beyond the three goal categories (special affordable, low-mod, and underserved areas) and look at the underlying characteristics of the loans.

Table 3.6 disaggregates the 813,371 additional goals-qualifying purchases into the various dimensions discussed above. If the 2005 subgoals had been in effect since 1999 (and given the various assumptions of this analysis), under HUD's simulation model, the GSEs would have purchased 293,686 additional first-time homebuyer loans, 216,713 additional minority loans (of which 101,569 would have been for first-time homebuyers), and 274,816 additional less-than-ten-percent downpayment loans (of which 95,835 would have been less-than-five-percent downpayment loans).[51] It is also important to focus on subgroups that face the more severe problems accessing mortgage credit. For example, if the 2005 subgoals had been in effect since 1999, the GSEs would have purchased 65,072 additional first-time homebuyer loans with a less-than-five-percent downpayment. Based on the purchasing patterns of the GSEs in 12 metropolitan areas, 174,183 of the 813,371 additional purchases over the years 1999 through 2002 would have been from borrowers with a FICO score less than 660. The additional low-FICO (less than 660 score) purchases include 83,082 special affordable, 142,981 low-mod and 119,875 underserved area loans. Still, over half, 450,050, of the additional purchases would have had high (greater than 720) FICO scores.

These calculations are based on comparisons of the home purchase subgoals for 2005 with what actual performance on the subgoal categories was during 1999-2002. They are instructive, but in practice if these subgoals had been in effect, the GSEs' performance on them might have been higher. Also, it should be noted that the gaps between the new subgoal levels and the estimates of what performance would have been were greater in 1999 than in the past couple of years. For example, average GSE performance on the low-mod home purchase subgoal in 1999 was 39.5 percent, 5.5 percentage points below the subgoal of 45 percent, but the gap would have shrunk to 2.0 percentage points in 2002, when average performance would have been 43.0 percent.

Despite these caveats, these calculations indicate that the size of the GSEs is such that their activities have large impacts on the home purchase mortgage market, at least in terms of the numbers of loans involved. And they illustrate clearly that loans targeted by HUD's housing goals are more concentrated among groups such as first-time

[50] This argument may not apply in considering the underserved areas goal. That is, that goal is designed to encourage additional mortgage lending in low-income and high-minority census tracts, which, based on HUD's research, historically have had high mortgage denial rates and low mortgage origination rates. Thus loan characteristics, such as the level of the down payment, may not be relevant in determining whether or not the GSEs are adequately providing financing for such areas.

[51] The goal percentages in Table 3.6 may understate the number of additional goals-qualifying loans for these categories due to the removal of all loan records with missing information. For instance loan records were removed where borrower income was not available. If some of these loans were included in the Underserved Areas goal calculation for minority homebuyers, goal qualifying loan levels would increase.

homebuyers, minority homebuyers, and homebuyers who cannot afford to make large downpayments.

e. GSE Purchases Needed to Meet the Housing Goals and Subgoals: Overview of Purchase Model

Chapter 6 develops a model for estimating the additional purchases under the new housing goals and home purchase subgoals. This section uses results from that model to examine the impacts of the new goals and subgoals, along the same lines as discussed in the previous section. While Chapter 6 presents the technical details of the model, an overview of the model's main components and assumptions is provided here; this should assist the reader in interpreting the various estimates of additional GSE purchases. The anticipated impacts of the housing goals and subgoals on the GSEs' purchases are estimated by (1) projecting each GSE's performance if the goals were not changed (this is called "baseline performance"); (2) calculating the magnitude of any shortfalls from the new goals and subgoals; and (3) specifying scenarios for how the additional goals business is distributed across various property types in order to eliminate the shortfalls. As explained in Chapter 6, there are many ways in which the GSEs can target purchases to meet the goals. Purchase scenarios are based on several assumptions and are <u>purely illustrative</u>. However, the estimates provide some sense of the magnitude of additional goals-qualifying mortgages that the GSEs must purchase to meet HUD's housing goals. As discussed below, the baseline projections are important for examining the feasibility of the housing goals.

The analysis starts with a baseline, that is, assumptions about what the GSEs would buy in absence of the new goals. The higher a GSE's baseline performance (e.g., low-mod percent of business), the smaller is its shortfall from a given set of goal and subgoal targets, and the smaller are the additional goals-qualifying loans that GSE has to purchase to meet the goal and subgoal targets. As explained in Chapter 6, there are three key assumptions that drive the baseline results and the required additional purchases. <u>First</u>, is an assumption about the goals-qualifying percentages for the GSE's single-family-owner purchases, which account for over four-fifths of each GSE's business. The purchase model can assume that the GSEs' single-family-owner performance is similar to their performance in 2000, 2001, 2002 and to their average performance between 2000 and 2002. As an example, consider the purchase model based on 2000-2002 performance. By "performance in 2000-2002" or "2000-2002 parameters" we mean the *average* share of a GSE's single-family-owner loans accounted for by low- and moderate-income loans, loans in underserved areas, and special affordable loans during the period, 2000 through 2002. The "individual performance" years (2000, 2001 and 2002) are interpreted similarly. For example, by "performance in 2002" or "2002 parameters" we mean the share of a GSE's single-family-owner loans accounted for by low- and moderate-income loans, loans in underserved areas, and special affordable loans during 2002. Sensitivity analyses can be conducted based on varying each GSE's 2000-2002 performance. It should be noted that the GSEs' single-family owner performance for 2003 can also now be included in the model, which is a change from the regulatory analysis in the 2004 proposed GSE rule.

Second, is an assumption about each GSE's baseline "multifamily mix," that is, the share of all GSE-financed dwelling units that are multifamily. Multifamily units qualify for the housing goals at a much higher rate than do single-family-owner units.[52] Therefore, a higher assumed multifamily mix for a GSE's baseline business yields higher baseline projections for that GSE's goals performance (and thus a smaller shortfall from the new housing goals and less need to purchase additional goals-qualifying mortgages). The multifamily shares of total (both single-family and multifamily) mortgage market originations and of the GSEs' purchases tend to be larger in a "home purchase" environment, as compared with a "refinance environment"; in the latter case, single-family originations (driven by heavy refinancing) dominate both the market and the GSEs' purchases, thus producing low multifamily mixes, with the result being lower projected housing goal percentages. (As discussed later, the share of all GSE-financed dewelling units that are single-family rental units is also an important consideration, for the same reason that the multifamily mix is important – those rental loans qualify for the goals at a high rate. The discussion below will highlight differences between Fannie Mae and Freddie Mac with respect to both their multifamily mixes and their single-family-rental shares.)

Third, and related to the first two assumptions, is an assumption about the type of mortgage market environment that might exist during the 2005-2008 period when the new housing goals are in effect; for example, a "home purchase environment" or a "heavy refinance environment," and in the case of the former, whether interest rates are assumed to remain at low, affordable levels as they have in the recent past, or whether they are expected to rise. The analyses reported below and in Chapter 6 focus on a "home purchase environment"[53] characterized by affordable interest rates; sensitivity analyses are presented for a less affordable "home purchase environment" and a "heavy refinance environment." In the home purchase environment, Fannie Mae's baseline multifamily mix is 12.0 percent and Freddie Mac's, 10 percent, although alternative multifamily mixes are considered below.

In cases where a GSE's baseline performance is below the new goal and subgoal levels, the simulation model calculates the number of metropolitan area single-family-owner home purchase mortgages needed to meet the metropolitan home purchase subgoals. Any additional shortfalls on the overall housing goals are satisfied by the GSE purchasing additional single-family and multifamily mortgages in the same pattern that it has met past housing goals. The end result is a combination of additional single-family

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[52] For example, over 90 percent of multifamily units qualify for the low-mod goal, compared with about 40-45 percent of single-family-owner units. Single-family rental units also qualify at a high rate.

[53] The mortgage market is projected to be $1.7 trillion, which produces a conventional conforming market of $1,197 billion. The GSEs are projected to have a combined 60 percent share of the single-family conventional conforming mortgage market—34.8 percent for Fannie Mae and 25.2 percent for Freddie Mac. But as emphasized in Chapter 6, the important assumption in this analysis is not the overall dollar amount of single-family originations, but the assumption about the multifamily share of the market (as well as the multifamily share of each GSE's purchases).

and multifamily purchases that result in each GSE meeting all three housing goals and all three home purchase subgoals. While this provides an overview of how the purchase model works, readers are referred to Chapter 6 for a more detailed explanation of how the model estimates the additional GSE purchases to meet the goal and subgoal targets. As noted earlier and as emphasized in Chapter 6, any set of additional purchases generated by the model is purely illustrative, as there are a multiplicity of ways for Fannie Mae or Freddie Mac to meet a given set of housing goals and home purchase subgoals.[54]

f. The GSEs' Baseline Performance on the Overall Housing Goals

As shown in Table 3.2a, the GSEs' performance on the overall housing goals during 2001, 2002, and 2003 was significantly below the new housing goal targets. But in a home purchase environment such as that described in the previous section, the GSEs' baseline goals performance would be much better than their performance during heavy refinancing years such as 2001, 2002, and 2003. There are two reasons for this, one concerning refinance loans and one concerning the multifamily share of the GSEs' business. First, in a heavy refinance environment, refinance loans are characterized by low goals-qualifying shares (because middle-income and high-income homeowners dominate a refinance market) and, of course, they account for most of the GSEs' single-family-owner business at that time. On the other hand, during a home purchase environment, refinance loans account for a much lower share of the GSEs' single-family-owner business and, in addition, the goals-qualifying characteristics of refinance loans are typically not much different than those of home purchase loans. Second, in a heavy refinance environment, single-family-owner loans (specifically refinance loans) dominate the GSEs' business, which reduces the multifamily share of the GSEs' business (about 7 percent in 2002).[55] On the other hand, in a home purchase environment, the multifamily share is higher (e.g., the 10-12 percent mentioned earlier), which increases the goals-qualifying shares of the GSEs' baseline business.

The concepts of a baseline and a goals shortfall can be illustrated in the case of Freddie Mac. In one of the simulations of a home purchase environment that assumed a 10-percent multifamily mix for Freddie Mac, the baseline goals performance for Freddie Mac was as follows: 21.0 percent for special affordable, 51.4 percent for the low-mod goal, and 34.9 percent for the underserved areas goal—called "scenario A" below. In

[54] As explained in Chapter 6, the purchase model assumes that goals will be met by additional, goals-related purchases rather than by restrictions on core business. This assumption is appropriate as long as there are no binding resource constraints on GSE loan purchase volumes, which there are not. Analysis in Chapter 6 also shows that the GSEs earn rather high rates of return on both their core business and their goals-qualifying business, which suggests that the GSEs would not likely deviate, or pull back too much from their past purchase patterns (although some exceptions are discussed in the text). However, as emphasized in the text, there are a multiplicity of ways the GSEs could choose to meet the housing goals, which could result in lower or higher single-family and multifamily purchases than those provided in the text.

[55] The multifamily share of Freddie Mac's business increased to 10.3 percent in 2003, due to large bulk purchases of multifamily loans from Washington Mutual and Citibank. Because these were one-time purchases needed by Freddie Mac to meet the 2003 housing goals, the year 2003 data is probably not useful for examining historical patterns in Freddie Mac's purchases of multifamily mortgages.

another simulation that assumed a 10-percent multifamily mix for Freddie Mac but also assumed slightly higher single-family-owner goal-qualifying percentages for Freddie Mac, the baseline goals performance for Freddie Mac was as follows: 21.4 percent for special affordable, 52.2 percent for the low-mod goal, and 36.0 percent for the underserved areas goal—called "scenario B" below. Freddie Mac's baseline performance in scenarios A and B is larger than its actual performance during 2001-2003 (based on projected 2000-Census-based data): special affordable (19.1 percent in 2001, 17.8 percent in 2002, and 19.0 percent in 2003), low-mod (47.0 percent in 2001, 44.6 percent in 2002, and 45.3 percent in 2003), and underserved areas (32.5 percent in 2001, 32.4 percent in 2002, and 31.7 in 2003). Again, the reasons for these differences are the higher multifamily mix in the two scenarios (10 percent versus 7.3 percent in 2002), the lower weight for refinance loans (40 percent of single-family-owner business in the two scenarios versus approximately 70 percent in 2002), and higher goals-qualifying percentages for refinance loans in the two scenarios (explained below).

Thus, the two scenarios project a higher baseline performance for Freddie Mac in a home purchase environment, which means the shortfalls from the new goals are less than when compared to actual 2001-2003 experience. In 2005, the goal targets are 22 percent for special affordable, 52 percent for low-mod, and 37 percent for underserved areas. The 2005 goal shortfalls under (1) scenario A and (2) actual 2002 experience follows: special affordable (1.0 percent for scenario A and 4.7 percent for 2002 experience), low-mod (0.6 percent for scenario A and 7.4 percent for 2002), and underserved areas (2.1 percent for scenario A and 4.6 percent for 2002). Obviously, the new goal targets look much more feasible when examined in the context of a home purchase environment. As explained earlier, the increases in the housing goals are sequenced so that the GSEs can gain experience as they improve and move toward the new higher goals, essentially developing a new baseline performance standard each year (at that year's higher goal levels). Still, the above baseline under Scenario A can be compared to the new higher goal levels (below such a comparison is the basis for projecting the number of additional purchases under the new goals). In 2007, the new goal targets are 25 percent for special affordable, 55 percent for low-mod, and 38 percent for underserved areas. Therefore, in the case of 2007 goals, Freddie Mac's shortfall under the Scenario A baseline is as follows: special affordable (4.0 percent); low-mod (3.6 percent), and underserved areas (3.1 percent). In 2008, the new goals are 27 percent for special affordable, 56 percent for low-mod, and 39 percent for underserved areas. In the case of the new 2008 goals, Freddie Mac's shortfall under the Scenario A baseline is as follows: special affordable (6.0 percent); low-mod (4.6 percent), and underserved areas (4.1 percent). While the shortfalls appear large, the GSEs have time to improve their performance before the higher out-year goal levels take effect.

Goals-Qualifying Percentages for Single-family-Owner Loans. While scenarios A and B assume the same multifamily mix for Freddie Mac, they different with respect to their assumptions about the goals-qualifying characteristics of Freddie Mac's baseline purchases of single-family-owner (SFO) loans. Explaining those differences will highlight the key assumptions in the purchase model that produce different estimates of both goal shortfalls and additional-purchase impacts. Readers not interested in this discussion may want to move to the presentation of the results below.

Scenario A. As a basis for projecting Freddie Mac's baseline goal purchases for 2005-2008, Scenario A assumed that the SFO home purchase shares would equal Freddie Mac's average performance during 2002 and 2003 – 15.7 percent for special affordable, 43.2 percent for low-mod; and 30.4 percent for underserved areas. That is, Scenario A assumes that Freddie Mac will acquire goals-qualifying home purchase loans in the same manner that it did during the two most recent years – 2002 and 2003. (Note these are the same data reported in Tables 3.3-3.5.) Similarly, under Scenario A, Fannie Mae's SFO home purchase shares would equal its 2002-2003 average: 16.8 percent for special affordable, 45.6 percent for low-mod; and 32.2 percent for underserved areas. Of course, one would expect higher baseline overall goal scores for Fannie Mae because Fannie Mae's goals-qualifying SFO percentages are higher than Freddie Mac's goals-qualifying SFO percentages; the analysis below will show that is indeed the case.

One advantage of using the GSEs' "2002-2003 SFO parameters" is that they reflect both GSEs' recent improvement in purchasing goals-qualifying home purchase loans—given that housing and mortgage market conditions are not expected to deteriorate to any significant degree over the next few years, one might expect the GSEs (assuming no increase in the housing goals) to continue purchasing goals-qualifying home loans at the same (or a similar) rate as they did in 2002-2003. Thus, the "2002-2003 parameters" capture the GSEs' recent improvement, which provides a reasonable starting point for projecting their future baseline purchases of special affordable, low-mod, and underserved areas loans. Some additional comments about Scenario A are as follows:

> (1) **Missing Data Issue.** In the regulatory analysis that accompanied the 2004 proposed GSE rule, the the SFO goals-qualifying percentages for special affordable and low-mod loans (e.g., the low-mod share of Freddie Mac's purchases of home loans) were multiplied by a discount factor of 0.98 to reflect historical patterns of missing borrower incomes in the GSEs' SFO data. Loans with missing borrower income data are currently included (subject to certain caps) in the denominator of the official goals calculations, but are excluded in HUD's projection-model calculations, which means that the model calculations yield higher goal performance than would the official goal performance numbers. Thus, since the input data in the purchase model did not account for missing data, it was necessary in the earlier regulatory analysis to discount the various goals-qualifying percentages used in the projection model. But as explained in the Preamble to the Final Rule, HUD has offered the GSEs relief on missing data. There is probably no need for a discount factor under the new missing data and counting rules established in the Final Rule. If missing data remains an issue, it should be a minor one. Therefore, no missing data adjustment is made in this regulatory analysis. (It should be noted that Fannie Mae commented that HUD's market estimates should be reduced by at least one percentage point due to

HUD's ignoring missing data; however, as noted above, this issue should be resolved by the new counting rules in the Final Rule.)

(2) **Treatment of SFO Refinance Loans in A Home Purchase Environment.** The 2002-2003 special affordable and low-mod percentages of SFO refinance loans were increased so that they are only slightly below the corresponding 2002-2003 home purchase percentages. In the projection model for Scenario A, the underserved area percentage for refinance loans was assumed to equal the 2002-2003 underserved area percentage for home purchase loans. As noted earlier, it would have been unrealistic to apply low goals-qualifying percentages for refinance loans from a heavy refinance environment (such as 2002 or 2003) to refinance loans in a home purchase environment.

(3) **0.975 Scenario A or 0.950 Scenario A.** As noted earlier, housing and mortgage market conditions are expected to remain favorable over the next few years (see Appendix A of the proposed GSE Rule for a summary of market forecasts). However, interest rates are expected to increase slightly, although they would still remain at historically low levels. To reflect the possibility of slightly less affordable conditions, sensitivity analyses can be conducted by reducing the various goals-qualifying percentages from the above steps by discount factors such as 0.975 and 0.950. For example, a 0.975 (0.950) discount factor would reduce the 2002-2003 low-mod average share of Freddie Mac's home purchase loans in metropolitan areas from 43.2 percent to 42.1 (41.0) percent. While these represent only slight reductions, they could be realistic ones.

To conclude, there is no need to have an adjustment for missing data (or at least, it would be a very small one if one is needed), there is an adjustment to recognize that refinance loans in a home purchase environment have different goals-qualifying characteristics than they do in a heavy refinance environment, and there are some adjustments to allow for simple sensitivity analyses. As explained earlier, other simulations could be based on other sets of goals-qualifying parameters (such as assuming the average of the goals-qualifying percentages between 2000 and 2003) and other multifamily mixes.

Scenario B. Scenario B assumes that the SFO goals-qualifying parameters that are input into the simulation model are each GSE's previous peak performance for each housing goal category. For each GSE, the previous peak performances for the special affordable and low-mod categories were during 2003, while the previous peak performances for the underserved areas category were during 2002. As can be seen from Tables 3.3 to 3.5, the previous peak performance levels were as follows: special affordable (16.1 percent for Freddie Mac and 17.7 percent for Fannie Mae, both 2003 numbers); low-mod (44.2 percent for Freddie Mac and 47.5 percent for Fannie Mae, both 2003 numbers); and underserved areas (31.7 percent for Freddie Mac and 32.3 percent for Fannie Mae, both 2002 numbers). Two points should be made about the SFO home purchase parameters in this scenario. First, Freddie Mac's 31.7 percent performance for underserved areas during 2002 is bracketed by poor performance of 27.3 percent in 2001 and 29.0 percent in 2003, which raises a question about how one should project Freddie Mac's future behavior. Freddie Mac will have a much higher baseline score for the overall underserved areas goal under Scenario B than under Scenario A (which averages the 29.0 percent and the 31.7 percent to obtain 30.4 percent). Second, Scenario B reflects Fannie Mae market-leading special affordable performance of 17.7 percent as well as its market-leading low-mod performance of 47.5 percent. With these SFO shares as inputs, the simulation model will produce rather high baseline performances on these two overall goals for Fannie Mae.

Similar to the discussion for Scenario A, there will also be a **0.975 Scenario B** and a **0.950 Scenario B**.

Simulations of Baseline Performance for Fannie Mae. In its comments, Fannie Mae made several statements about the infeasibility of their accomplishing the housing goals, the likelihood they would have to "manage their denominator" (i.e., restrict their purchases of non-goals-qualifying loans in order to reduce their denominator in the goals calculation, so that their goals percentage would be high enough to meet the new targets), the negative impacts of the higher goals on middle-class borrowers, and the potential higher costs to lower-income borrowers as there would be less opportunity to cross-subsidize these borrowers with revenues from non-goals-qualifying borrowers. Many of Fannie Mae's comments dealt with the combination of a heavy refinance environment (such as 2002 and 2003) and the higher, out-year goals; as explained in the Preamble to the Final Rule, HUD has offered a solution to the fact that the higher goals are less feasible during heavy refinance environments (also see later discussion of this issue). Still, Fannie Mae seemed to generalize its concerns to other environments as well.

These issues raised by Fannie Mae can be examined by looking at their baseline performance under the new goal targets. Only if their baseline goal scores are much below the new goal targets would there be any validity to their concerns (ignoring the issue of Freddie Mac for the moment). Table 3.9 presents the Fannie Mae baseline results for variations of Scenario A (average 2002-2003 SFO goals-qualifying parameters) and Scenario B (previous peak SFO goals-qualifying parameters). Under Scenario A, Fannie Mae's baseline performance is 24.3 percent on the special affordable goal, 55.0 percent on the low-mod goal, and 38.6 percent on the underserved areas goals. Not surprisingly, Fannie Mae's baseline performance is even higher in Scenario B, since it is based on the previous peak SFO performance: 25.1 percent on the special affordable goal, 56.5 percent on the low-mod goal, and 38.7 percent on the underserved areas goals. Table 3.9 provides the shortfall of Fannie Mae's baseline performance from the 2005-2008 goal targets. The following comments can be made about the results for Fannie Mae:

TABLE 3.9

Table 3.9

Projected Baseline Performance Compared with Housing Goal Targets: Fannie Mae

	Special Affordable					Low- and Moderate-Income					Underserved Areas			
	Baseline Performance	Shortfall: Baseline Minus Goal (Given Below)				Baseline Performance	Shortfall: Baseline Minus Goal (Given Below)				Baseline Performance	Shortfall: Baseline Minus Goal (Given Below)		
		22	23	25	27		52	53	55	56		37	38	39
Scenarios														
1. Scenario A	**24.3**	2.3	1.3	-0.7	-2.7	**55.0**	3.0	2.0	0.0	-1.0	**38.6**	1.6	0.6	-0.4
2. 0.975 Scenario A	**24.0**	2.0	1.0	-1.0	-3.0	**54.1**	2.1	1.1	-0.9	-1.9	**37.9**	0.9	-0.1	-1.1
3. Scenario B	**25.1**	3.1	2.1	0.1	-1.9	**56.5**	4.5	3.5	1.5	0.5	**38.7**	1.7	0.7	-0.3
4. 0.975 Scenario B	**24.7**	2.7	1.7	-0.3	-2.3	**55.5**	3.5	2.5	0.5	-0.5	**38.1**	1.1	0.1	-0.9
5. 0.950 Scenario A	**23.7**	1.7	0.7	-1.3	-3.3	**53.2**	1.2	0.2	-1.8	-2.8	**37.3**	0.3	-0.7	-1.7
6. 0.950 Scenario B	**24.4**	2.4	1.4	-0.6	-2.6	**54.6**	2.6	1.6	-0.4	-1.4	**37.4**	0.4	-0.6	-1.6

Note: See text for explanantion of scenarios.

Under Scenario A, Fannie Mae is projected: to surpass the 2005-2006 special affordable goals and nearly meet the 2007 special affordable goal; to surpass the 2005-2006 low-mod goals and meet the 2007 low-mod goal, and surpass the 2005-2007 underserved areas goals and almost meet the 2008 underserved areas goal. These results do not suggest all the negative impacts predicted by Fannie Mae; rather the goals appear quite feasible (of course, under the assumptions of Scenario A).

Under Scenario B, Fannie Mae is projected to fall about two percentage points short of the 2008 goal, surpass the 2008 low-mod goal, and almost meet the 2008 underserved areas goal. As noted earlier, Scenario B incorporates Fannie Mae's market leading performance during 2003 on the special affordable and low-mod SFO categories; if these levels can be maintained, Fannie Mae will have high goal scores in the home purchase environment envisioned here.

The new housing goals appear feasible for Fannie Mae even when the baseline SFO parameters are discounted. Under the 0.975 Scenario A, Fannie Mae's baseline projections either approach or are above all the 2005 and 2006 goal targets. Under the 0.950 Scenario B (i.e., 95 percent of its previous peak SFO performance), Fannie Mae's baseline projections are above the special affordable and low-mod goals for 2005 and 2006. In the latter case, Fannie Mae's baseline falls 2.6 percentage points short of the 2008 special affordable goal, 1.4 percentage points short of the 2008 low-mod goal, and 1.6 percentage points short of the 2008 underserved areas goal. Given that 2008 is four years away, it seems that Fannie Mae would have time to develop a strategy for meeting the 2008 goal targets.

Obviously, less affordable conditions would make the housing goals more difficult for Fannie Mae. If market conditions resulted in Fannie Mae being able to purchase SFO loans only at goals-qualifying shares of 95 percent of its 2002-2003 average (0.95 Scenario A), its baseline performance would fall to 23.7 percent on the special affordable goal, 53.2 percent on the low-mod goal, and 37.3 percent on the underserved areas goals; this baseline performance would place Fannie Mae 2-3 percentage points short of the 2008 goal targets. While this still seems quite feasible, it recognized that at some point, market conditions could deteriorate so much that the new housing goals would not be feasible; as discussed in the Final Rule, the 1992 GSE Act provides a solution for these situations where market conditions render goal-attainment infeasible.

Although it would have to improve its performance to meet them, the new goals appear feasible for Fannie Mae in all years. It should be noted that the Department has lowered each housing goal by one percentage point in order to match its revised market estimates.[56] Concerns raised about "denominator management" do not seemed to be an issue for Fannie Mae. In this regard, it is interesting to look briefly at how Fannie Mae might meet the new housing goals under one of the scenarios where they fall somewhat short. For illustrative purposes (explained further below), HUD calculated the additional goals-qualifying loans that Fannie Mae would have to purchase in order to meet the 2008 goals under the 0.975 Scenario A (which means that the baseline SFO goals-qualifying percentages for Fannie Mae, as well as for the market, are 0.975 times their 2002-2003 average). In order to satisfy the shortfalls in Table 3.9 for this scenario, Fannie Mae would need to increase its special affordable SFO purchases by 20 percent over baseline (or an increase of 77,000)[57] and its low-mod and underserved areas purchases by 10 percent above baseline. In this example, Fannie Mae's share of the SFO special affordable market would increase by six percentage points (from 30 to 36 percent). Fannie Mae's MF mix increased slightly from 12.0 percent to 12.4 percent; of course, Fannie Mae could follow a more rental-oriented strategy and meet the 2008 special affordable goal with fewer SFO purchases, as long as it met the 18-percent special affordable home purchase subgoal (as well as the other home purchase subgoals). Fannie Mae's additional purchases under the 2007 goals were also examined. For 2007, Fannie Mae's shortfalls were only one percentage point on each of the three goals and 1.5-2 percentage points on the subgoals. In order to satisfy these 2007 shortfalls in Table 3.9 for this scenario, Fannie Mae would need to increase its special affordable SFO purchases by 9 percent over baseline (or an increase of 36,000) and its low-mod and underserved areas purchases by 5 percent above baseline. In this example, Fannie Mae's share of the SFO special affordable market would increase by almost three percentage points (from 30.4 percent to 33.2 percent).

The above analysis suggests that while Fannie Mae would have to improve its performance, the goals and subgoals are quite feasible, assuming no serious negative change in economic conditions.

[56] As explained in Appendix D of the Final Rule, the market estimates were lowered by one percentage point mainly because HUD adopted HMDA data, rather than Residential Finance Survey (RFS) data, as the source for measuring the single-family investor share of the mortgage market; according to HMDA data, SF investors have accounted for about eight percent of all single-family mortgages, a lower figure that the 10-percent baseline figure that HUD used in the proposed rule. Although probably less accurate than the RFS, HMDA data are more consistent with the origination-based, lender-reported data that the GSEs receive.

[57] In this case, the model ended up with Fannie Mae overshooting the special affordable subgoal by 0.7 percentage points; thus, the figure in the text is probably an upper bound estimate, as Fannie Mae could choose another strategy (e.g., a more rental oriented strategy) in order to meet the 2008 special affordable target. The overshooting occurs in the model because the overall special affordable goal of 27 percent is more binding than the special affordable subgoal of 18 percent; the model satisfies the overall goal shortfall by purchasing special affordable loans in the same way that Fannie Mae has satisfied the goals in the past; this is why additional SF owner special affordable loans are purchased beyond the subgoal requirement. For this reason, there was no overshooting of the 18-percent subgoal in 2007 because the overall special affordable goal was only 25 percent.

Simulations of Baseline Performance for Freddie Mac. In their comments, Freddie Mac and its contractor (ICF) expressed similar concerns as Fannie Mae about "denominator management" and the infeasibility of the out-year goals. To a certain extent, these concerns of Freddie Mac probably reflect Freddie Mac's recognition that its past below-market-level performance will make obtaining market-level-performance a challenge. It is important to emphasize that Freddie Mac is not starting from the same place as Fannie Mae, for two reasons:

(1) Freddie Mac Has Below-Market SFO Goals-Qualifying Shares. The earlier discussion of the SFO home purchase subgoals (see Tables 3.3-3.5) showed that Freddie Mac has lagged behind both Fannie Mae and the market in funding goals-qualifying home purchase loans. This means that Freddie Mac's baseline SFO goals-qualifying shares in Scenarios A and B are going to be lower than the corresponding baseline shares for Fannie Mae, which will result in lower baseline scores on the overall goals, and larger shortfalls from the new housing goal targets.

(2) Freddie Mac Does Not Focus on Funding Rental Housing. In the past, Freddie Mac has placed less emphasis on funding "goals-rich" rental housing than Fannie Mae. As shown in Table 3.10, single-family rental dwelling units accounted for 6.7 percent (unweighted average) of all dwelling units financed by Freddie Mac between 1999 and 2002, as compared with 9.0 percent of all dwelling units financed by Fannie Mae. Similarly, multifamily rental units accounted for 9.0 percent (unweighted average) of all dwelling units financed by Freddie Mac between 1999 and 2002, as compared with 10.5 percent of all dwelling units financed by Fannie Mae. Combined, rental units have accounted for 15.7 percent of Freddie Mac's business, as compared with 19.5 percent of Fannie Mae's business. This approximately four percentage point differential in rental shares translates into a two-percentage-point reduction in the low-mod and special affordable goals for Freddie Mac, as compared with Fannie Mae.

TABLE 3.10

It should be noted that the baseline model assumes SF rental shares of 6.7 percent for Freddie Mac and 9.3 percent for Fannie Mae. The baseline model also assumes a MF mix of 10 percent for Freddie Mac and 12 percent for Fannie Mae. Freddie Mac's baseline multifamily mix of 10.0 percent is one percentage point above its 1999-2002 average mix of 9.0 percent (see Table 3.10). The 12.0 assumption for Fannie Mae is above its 1999-2002 average mix of 10.5 percent[58] but below its 2000 level of 13 percent. Taking into consideration that (i) 2001 and 2002 were relatively high single-family refinance years, which lowered the multifamily share of both GSEs relative to what it would have been in a more typical year, and that (ii) Freddie Mac has been substantially increasing its multifamily purchases recently, the higher multifamily mix (compared with

[58] The 1999-2002 average MF mix is used here instead of the 1999-2003 average because the increase in the multifamily share of Freddie Mac's business to 10.3 percent in 2003 was due to large bulk purchases of multifamily loans from Washington Mutual and Citibank. Because these were one-time purchases needed by Freddie Mac to meet the 2003 housing goals, the year 2003 data is probably not useful for examining historical patterns in Freddie Mac's purchases of multifamily mortgages.

Table 3.10

Single-Family Rental and Multifamily Rental Shares of the GSEs' Purchases

	Fannie Mae				
	Single-Family Owner	Single-Family Rental	Multifamily Rental	Total	Exhibit: Total Rental
1999	83.3%	6.8%	9.9%	100.0%	16.7%
2000	75.9%	10.8%	13.3%	100.0%	24.1%
2001	80.5%	8.6%	10.9%	100.0%	19.5%
2002	82.4%	9.9%	7.7%	100.0%	17.6%
2003	82.9%	8.7%	8.4%	100.0%	17.1%
Unweighted Average					
1999-2002	80.5%	9.0%	10.5%	100.0%	19.5%
1999-2003	81.0%	9.0%	10.0%	100.0%	19.0%

	Freddie Mac				
	Single-Family Owner	Single-Family Rental	Multifamily Rental	Total	Exhibit: Total Rental
1999	85.4%	6.1%	8.5%	100.0%	14.6%
2000	82.5%	7.2%	10.3%	100.0%	17.5%
2001	83.8%	6.7%	9.5%	100.0%	16.2%
2002	85.7%	6.6%	7.7%	100.0%	14.3%
2003	84.2%	5.1%	10.7%	100.0%	15.8%
Unweighted Average					
1999-2002	84.4%	6.7%	9.0%	100.0%	15.7%
1999-2003	84.3%	6.3%	9.3%	100.0%	15.7%

Note: Single-family rental dwelling units accounted for 6.8% of all dwelling units (owner and rental) financed by Fannie Mae in 1999. Thus, these are unit-based (not mortgage-based) distributions.

its 1999-2002 average) for Freddie Mac during the projection period appears reasonable. While a 12-percent MF mix for Freddie Mac will be considered below, the baseline analysis starts with the following rental shares for the two GSEs:

	Freddie Mac	Fannie Mae
Single-Family Rental Share	6.7%	9.3%
Multifamily Rental Share	10.0%	12.0%
Overall Rental Share	16.7%	21.3%

Given these assumptions, the simulation model projects Freddie Mac's baseline goals percentages for the various SFO scenarios, and the results are reported in Tables 3.11a and 3.11b. Not surprisingly, the Freddie Mac baseline goals percentages are significantly lower than those reported for Fannie Mae in Table 3.9. Table 3.11a presents the Freddie Mac's baseline results for variations of Scenario A (average 2002-2003 SFO goals-qualifying parameters) and Scenario B (previous peak SFO goals-qualifying parameters). Under Scenario A, Freddie Mac's baseline performance is 21.0 percent on the special affordable goal, 51.4 percent on the low-mod goal, and 34.9 percent on the underserved areas goals. Of course, Freddie Mac's baseline performance is higher in Scenario B, since it is based on the previous peak SFO performance: 21.4 percent on the special affordable goal, 52.2 percent on the low-mod goal, and 36.0 percent on the underserved areas goals. Table 3.11a provides the shortfall of Freddie Mac's baseline performance from the 2005-2008 goal targets. The following comments can be made about these results:

TABLES 3.11a AND 3.11b

Under Scenario A, Freddie Mac is projected: to fall slightly short of the 2005 special affordable and low-mod goals but significantly short (2.1 percentage points) of the 2005 underserved areas goal. Under this scenario, Freddie Mac would fall 6.0 percentage points short of the 2008 special affordable goal, 4.6 percentage points short of the 2008 low-mod goal, and 4.1 percentage points short of the 2008 underserved areas goal. These results clearly indicate that the new goal targets will be much more challenging for Freddie Mac than for Fannie Mae.

Under Scenario B, Freddie Mac's baseline performance is somewhat higher, as it is close to meeting the 2005 special affordable goal, meets the 2005 low-mod goal, and falls only one percentage point short of the 2005 underserved area goal. As noted earlier, Scenario B incorporates Freddie Mac's 2002 SFO share (31.7 percent) for underserved areas, which is much higher than its 2003 share (only 29.0 percent). However, as indicated in Table 3.11a, Freddie Mac continues to fall well short of the 2008 goals even taking into account its previous peak SFO performance.

The new housing goals appear even more challenging for Freddie Mac when the baseline SFO parameters are discounted. Under either the 0.975 Scenario A or the 0.975 Scenario B, Freddie Mac's baseline projections are below the 2005 goal

Table 3.11a

Projected Baseline Performance Compared with Housing Goal Targets: Freddie Mac

	Special Affordable					Low- and Moderate-Income					Underserved Areas			
	Baseline Performance	Shortfall: Baseline Minus Goal (Given Below)				**Baseline Performance**	Shortfall: Baseline Minus Goal (Given Below)				**Baseline Performance**	Shortfall: Baseline Minus Goal (Given Below)		
		22	23	25	27		52	53	55	56		37	38	39
Scenarios														
1. Scenario A	**21.0**	-1.0	-2.0	-4.0	-6.0	**51.4**	-0.6	-1.6	-3.6	-4.6	**34.9**	-2.1	-3.1	-4.1
2. 0.975 Scenario A	**20.7**	-1.3	-2.3	-4.3	-6.3	**50.5**	-1.5	-2.5	-4.5	-5.5	**34.3**	-2.7	-3.7	-4.7
3. Scenario B	**21.4**	-0.6	-1.6	-3.6	-5.6	**52.2**	0.2	-0.8	-2.8	-3.8	**36.0**	-1.0	-2.0	-3.0
4. 0.975 Scenario B	**21.1**	-0.9	-1.9	-3.9	-5.9	**51.3**	-0.7	-1.7	-3.7	-4.7	**35.3**	-1.7	-2.7	-3.7
5. 0.950 Scenario A	**20.4**	-1.6	-2.6	-4.6	-6.6	**49.6**	-2.4	-3.4	-5.4	-6.4	**33.6**	-3.4	-4.4	-5.4
6. 0.950 Scenario B	**21.3**	-0.7	-1.7	-3.7	-5.7	**51.3**	-0.7	-1.7	-3.7	-4.7	**35.1**	-1.9	-2.9	-3.9
7. 0.975 Scenario B With 12% MF Mix	**21.6**	-0.4	-1.4	-3.4	-5.4	**52.2**	0.2	-0.8	-2.8	-3.8	**35.0**	-2.0	-3.0	-4.0

Note: See text for explanantion of scenarios.

Table 3.11b

Projected Freddie Mac Baseline Performance Assuming Fannie Mae's Single-Family Rental Characteristics

	Special Affordable					Low- and Moderate-Income					Underserved Areas			
	Baseline Performance	Shortfall: Baseline Minus Goal (Given Below)				**Baseline Performance**	Shortfall: Baseline Minus Goal (Given Below)				**Baseline Performance**	Shortfall: Baseline Minus Goal (Given Below)		
Scenarios		22	23	25	27		52	53	55	56		37	38	39
8. Scenario A	**22.8**	0.8	-0.2	-2.2	-4.2	**52.3**	0.3	-0.7	-2.7	-3.7	**36.7**	-0.3	-1.3	-2.3
9. Scenario A With 12% MF Mix	**23.5**	1.5	0.5	-1.5	-3.5	**53.1**	1.1	0.1	-1.9	-2.9	**37.2**	0.2	-0.8	-1.8
10. 0.975 Scenario A	**22.5**	0.5	-0.5	-2.5	-4.5	**51.4**	-0.6	-1.6	-3.6	-4.6	**36.1**	-0.9	-1.9	-2.9
11. Scenario B	**23.1**	1.1	0.1	-1.9	-3.9	**53.1**	1.1	0.1	-1.9	-2.9	**37.8**	0.8	-0.2	-1.2
12. Scenario B With 12% MF Mix	**23.8**	1.8	0.8	-1.2	-3.2	**53.9**	1.9	0.9	-1.1	-2.1	**38.2**	1.2	0.2	-0.8
13. 0.975 Scenario B	**22.8**	0.8	-0.2	-2.2	-4.2	**52.2**	0.2	-0.8	-2.8	-3.8	**37.1**	0.1	-0.9	-1.9
14. 0.975 Scenario B With 12% MF Mix	**23.5**	1.5	0.5	-1.5	-3.5	**53.0**	1.0	0.0	-2.0	-3.0	**37.6**	0.6	-0.4	-1.4

Note: See text for explanantion of scenarios.

targets (although somewhat close for the special affordable and low-mod goals under 0.975 Scenario B).

Based on Table 3.11a, the new goal targets will be much more challenging for Freddie Mac than for Fannie Mae.

Baseline Results Assuming an Increase in Freddie Mac's Focus on Rental Properties. To examine the Freddie Mac feasibility issue further, Table 3.11b presents a different set of baseline results for Freddie Mac, first assuming that Freddie Mac has the same share (9.3 percent) of single-family rental units as Fannie Mae, and second assuming that Freddie Mac also has the same share (12.0 percent) of multifamily rental units as Fannie Mae.[59] With respect to the first case, it is not clear why Freddie Mac does less SF rental business than Fannie Mae. The top portion of Table 3.11b shows that Freddie Mac's shortfalls would be considerably reduced if they operated a single-family rental business along the same lines as Fannie Mae. Since the special affordable goal is the most challenging for Freddie Mac, the baseline results for that goal will be highlighted here. Under Scenario A, Freddie Mac's shortfall from the 2008 special affordable goal was reduced from 6.1 percent (see Table 3.11a) to 4.2 percent (see Table 3.11b); Freddie Mac's baseline performance would meet the 2005 special affordable goal (as well as the 2005 low-mod goal and would be close to the 2005 underserved areas goal). Under Scenario B (previous peak SFO performance), Freddie Mac's shortfall from the 2008 special affordable goal drops further to 3.9 percent, while its shortfalls on the 2008 low-mod and underserved area goals drop to 2.9 percent and 1.2 percent, respectively. The second case also includes a 12-percent MF mix for Freddie Mac, which may not be an unreasonable assumption given that Freddie Mac has successfully rebuild its multifamily business. In this case, the 2008 shortfalls for the special affordable goal are 3.5 percent under Scenario A and 3.2 percent under Scenario B; with a 12-percent MF mix, Freddie Mac meets the 2005 and 2006 special affordable goals under both Scenarios A and B. It should be noted that the shortfalls in Table 3.11b for the underserved areas goal are mostly in the 1-3 percentage point range (as compared with the 3-5 percentage point range in Table 3.11a). Similarly, the 2008 low-mod shortfalls are reduced from 4-6 percentage points (see Table 3.11a) to 2-4 percentage points (see Table 3.11b). Although these results may be over simplistic, they show clearly that much of Freddie Mac's concern about the feasibility of the new housing goal targets relates to its relatively low role in funding rental housing.

Additional Purchases by Freddie Mac. It is interesting to look at how Freddie Mac might meet the new housing goals. For illustrative purposes (explained further below), HUD calculated the additional goals-qualifying loans that Freddie Mac would have to purchase in order to meet the 2007 and 2008 goals under Scenarios A and B. In order to satisfy the 2007 shortfalls in Table 3.9 for Scenario A, Freddie Mac would need

[59] The first case was implemented by simply putting Freddie Mac's SFO parameters in Fannie Mae's model and changing the MF mix to 10 percent; thus, it was assumed that Fannie Mae's goals-qualifying shares for rental properties would also be assigned to Freddie Mac. The second case was implemented by changing the MF mix from 10 percent to 12 percent but retaining all the other assumptions of the first case. Thus, except for the SFO parameters, this case reflects Fannie Mae's experience.

to increase its special affordable SFO purchases by 25 percent over baseline (or an increase of 70,000) and its low-mod and underserved areas purchases by about 15 percent above baseline. In this example, Freddie Mac's share of the SFO special affordable market would increase by five percentage points (from 21 percent to 26 percent). In this example, Freddie Mac's multifamily purchases would increase by 26 percent, raising its MF mix from 10.0 percent to 11.5 percent. In the case of the 0.975 Scenario A, Freddie Mac's additional purchases would be higher (e.g., a 32-percent increase in SFO special affordable loans raising its market share from 22.5 percent to 28.0 percent) while in the case of Scenario B, Freddie Mac's additional purchases would be lower (e.g., an 18 percent increase in SFO special affordable loans, raising its market share from 23.8 to 27.0 percent).[60] These comparisons suggest while the 2007 goals and subgoals will be challenging for Freddie Mac, they appear feasible with some more effort on the part of Freddie Mac.

The further increases in the goals from 2007 to 2008 require some effort by Freddie Mac, particularly given its low baseline performance. However, the staging of the goal increases over a four-year period provides an opportunity for Freddie Mac to develop the necessary strategies so that its baseline performance will rise over time, approximating that of Fannie Mae, which has a significantly higher baseline performance than Freddie Mac. Under Scenario A (B), Freddie Mac would need to increase its SFO special affordable purchases in 2008 by 38 (30) percent, its SFO low-mod purchases by 18 (13) percent, and its SFO underserved area purchases by 20 (24) percent. In this illustrative example of Scenario A (B), Freddie Mac had to increase its multifamily purchases by 34 (28) percent, raising its MF mix from 10.0 percent to 11.9 (11.7) percent. Practically all of the multifamily purchases were concentrated in the special affordable category (e.g., a 66 percentage point increase in special affordable MF purchases under Scenario A). Obviously, the special affordable goal and subgoal will be the challenge for Freddie Mac in the out-years. As noted above, Freddie Mac would not be facing these shortfalls if its business operation looked more like Fannie Mae's business – specifically, more targeted SFO loans and more rental loans.

Freddie Mac will have time to develop its business plan to reach the out-year goals because, as noted earlier, the 2005 and 2006 goals appear particularly feasible for Freddie Mac – for example, in order to meet the 2006 goals and subgoals, Freddie Mac would have to increase its SFO special affordable purchases by 18 percent under 0.975 Scenario A, and by 13 percent under Scenario A – both of which seems feasible. Thus, Freddie Mac will have time in order to transform its business in a direction that focuses more on targeted lending; with such a foundation, Freddie Mac will be able to exhibit a higher baseline performance, which will allow it to meet the challenge of higher out-year goals.

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[60] Note that Freddie Mac has a higher baseline market share under Scenario B than under Scenario A, as it should since Scenario B assumes a higher level of performance for Freddie Mac. It should also be noted that the market share analysis excludes Freddie Mac's purchases of seasoned loans; see footnote 70 below for further explanation.

g. Additional Purchases to Meet the Goals and Subgoals: Further Analysis

Section C.4.e above discussed HUD's projection of additional GSE purchases under the housing goals in an analysis that focused on the feasibility of each GSE meeting the new housing goal and subgoal targets. This section continues the discussion of additional GSE purchases with an emphasis on the likely characteristics of these additional purchases and the magnitude of these purchases relative to the non-GSE market. The new housing goals for 2006 can be used to illustrate the additional purchase calculations. As the above data indicate, Freddie Mac is projected to fall short of the 2006 housing goals and home purchase subgoals, and thus would have to make additional purchases to satisfy the goal and subgoal targets. Under Scenario A, Freddie Mac could meet the proposed targets by purchasing (over its baseline purchases) about 69,000 additional goals-qualifying home purchase loans and 34,000 goals-qualifying refinance loans. Under Scenario B, which reflects higher goals-qualifying percentages for Freddie Mac's baseline SFO purchases, Freddie Mac could meet the 2006 targets by purchasing (over its baseline purchases) about 40,000 additional goals-qualifying home loans and 21,000 goals-qualifying refinance loans.

The figures reported above for additional goals-qualifying purchases are "net figures" in the sense that they were calculated accounting for the overlap among the three separate housing goals—for example, a special affordable loan is also a low-mod loan. The additional purchases can also be presented by individual housing goal. Under Scenario A, Freddie Mac acquired the following additional SFO loans (both home purchase and refinance) in order to meet the 2006 goal and subgoal targets: special affordable, 36,280; low-mod, 74,663; and underserved areas, 79,617.[61] As discussed in the previous section, these additional purchases can also be expressed as a percentage increase over the baseline purchases in metropolitan areas. For example, the 36,280 additional special affordable loans under Scenario A represented 13.0 percent of Freddie Mac's baseline purchases of SFO special affordable home loans. In all, the percentage increases under Scenario A were as follows: special affordable, 13.0 percent; low-mod, 9.7 percent; and underserved areas, 13.6 percent. As discussed in the previous section, these percentage increases appear quite feasible. Under the 0.975 Scenario A, the percentage increases would be slightly higher due to the assumed lower baseline performance for Freddie Mac: special affordable, 18.3 percent; low-mod, 13.8 percent; and underserved areas, 19.5 percent

As explained earlier, these numbers are purely illustrative, as Freddie Mac could choose entirely different strategies to meet the 2006 goals. However, they provide some sense of the magnitude of the additional effort required by Freddie Mac, as discussed in the previous section. To meet the 2006 goal and subgoal levels, Freddie Mac would have

[61] Under Scenario B, Freddie Mac figures for additional SFO loans in order to meet the 2006 goal and subgoal targets are as follows: special affordable, 20,367; low-mod, 43,800; and underserved areas, 46,896. For various reasons, the purchase model slightly overshoots the low-mod subgoal by 0.6 percentage points, which means the additional low-mod purchases could be slightly overstated, depending on the ability of Freddie Mac to purchase loans that qualify for all three goals (e.g., a special affordable loan for a property located in an underserved area)..

to purchase both single-family-owner and multifamily loans that qualify for the housing goals. The need for additional goals-qualifying purchases is not surprising given the significant shortfalls from the new goal levels of Freddie Mac's baseline goals percentages (see above).

As discussed in Section C.4.e, the additional purchase requirements for Fannie Mae to meet the 2005 and 2006 goals and subgoals are much lower than those described above for Freddie Mac. This is due to Fannie Mae's higher goals-qualifying percentages for SFO loans and to the higher multifamily mix (12 percent) assumed for Fannie Mae—these factors result in Fannie Mae's baseline goal and subgoal percentages being higher than Freddie Mac's, which calls for fewer additional goals-qualifying purchases for Fannie Mae to meet the new goal and subgoal targets. Hence, for Fannie Mae, it is more interesting to consider the 2007 goal and subgoal targets. Under 0.975 Scenario A, Fannie Mae falls short of the 2007 targets (see earlier discussion) and could meet the targets by the following additional SFO purchases: special affordable, 36,630; low-mod, 66,672; and underserved areas, 44,076. [62] [63] Fannie Mae's additional 2007 SFO purchases can also be expressed as a percentage increase over its baseline purchases: special affordable, 9.4 percent; low-mod, 6.2 percent; and underserved areas, 5.7 percent. These percentage increases in projected 2007 purchases of goals-qualifying home loans in metropolitan areas are much lower than those reported earlier for Freddie Mac.[64]

As explained earlier, the magnitude of the additional purchases depends importantly on certain key baseline assumptions, such as the assumed multifamily mix and the goals-qualifying parameters that are used to project SFO home purchase mortgages. Each GSE's baseline performance would fall with lower initial multifamily

[62] The additional purchases reported in the text, combined with Fannie Mae's baseline purchases, meet the proposed housing goals. Again, it is important to emphasize that Fannie Mae (like Freddie Mac) could choose strategies that result in a larger or smaller number of additional loan purchases—for example, a policy of purchasing only loans (e.g., special affordable loans in underserved areas) that have the greatest overlap with the three housing goals would lead to a smaller number of additional purchases needed to meet the proposed goals and subgoals.

[63] The following are the additional SFO loans that Fannie Mae would have to purchase in order to meet the 2008 goal and subgoal targets under 0.975 Scenario A: special affordable, 77,297 (19.8 percent over baseline); low-mod, 100,128 (9.3 percent over baseline); and underserved areas, 77,558 (10.1 percent over baseline).

[64] A different perspective could be taken with respect to Fannie Mae. The model in the text assumes that Fannie Mae would actually purchase its baseline projections if there were no change in the 2005 or 2006 housing goals; this seems like a reasonable assumption given the high financial returns (see Section E of Chapter VI) that Fannie Mae earns on goals-qualifying loans, as well as non-goals-qualifying loans. One could take a different perspective—that Fannie Mae would revert back to the current goal levels if the proposed goals and subgoals were not put in place. Assuming Fannie Mae's baseline goals percentages equaled the current goal percentages would yield a higher estimate of additional purchases due to the proposed goals and subgoals. But as noted earlier, there is reason to believe that Fannie Mae would purchase according to the baseline estimates provided in the text. Still, there could be situations over time where Fannie Mae might reduce its baseline behavior and revert back to the current goals—the proposed goals and subgoals for 2005-08 ensure that Fannie Mae would not do that. (This footnote assumes those situations when Fannie Mae's baseline goals percentages are above the goal targets.)

mixes and with SFO parameters based on earlier years (such as the 1999-2003 average). However, in a home purchase environment, it is likely that the multifamily share of each GSE's business will return to earlier, pre-refinance-environment levels. In addition, there is no reason to assume that either GSE will pull back from their recent improved performance purchasing goals-qualifying home loans. Therefore, the above results probably provide a reasonable approximation of each GSE's future goals performance, under the assumption of a home purchase environment characterized by affordability conditions similar or only somewhat less favorable than has existed recently.

Characteristics of Additional Purchases. Numerous purchase models were run for 2005-2008 goals in a home purchase environment, along the lines described above. Considering both GSEs, the estimates of additional, goals-qualifying home loans varied rather widely. Under the Scenario A (where SFO baseline goals-qualifying parameters represent 2002-2003 averages), the additional goals-qualifying SFO purchases are greater than under Scenario B (where SFO baseline parameters represent the previous peak performance). The question examined in this section concerns the characteristics of these additional goals-qualifying loans—do the characteristics of the loans purchased suggest that the GSEs are solving problems of credit access and extending homeownership opportunities.

Recall Table 3.7, which showed that special affordable, low-mod, and underserved area loans were more likely than non-goals-qualifying loans to be first-time homebuyer loans, minority loans, or low-downpayment loans—the latter three being important dimensions for gauging the impact of the new housing goals and subgoals. Table 3.12a shows the results of allocating the additional goals-qualifying home purchase loans along these dimensions under Scenario A, while Table 3.12b does the same for 0.975 Scenario A. As indicated in Table 3.12a, there could be approximately 400,000 additional goals-qualifying home loans purchased under Scenario A..[65] Considering both scenarios in Tables 3.12a and 3.12b, the range for first-time homebuyers is 151,000-236,000 while that for first-time homebuyer loans with a less-than-ten-percent downpayment is 74,000-115,000.[66] Considering both first-time and repeat homebuyer loans (see "All Additional Purchases" on the right side of Tables 3.12a and 3.12b), the GSEs would purchase an additional 120,000-184,000 loans originated for minority borrowers.

TABLES 3.12a AND 3.12b

[65] Under Scenario B, the number of additional goals-qualifying home loans purchased by the GSEs during 2005-2008 totaled 244,000. Considering all SFO loans (i.e., both home purchase loans and refinance loans), the number of additional goals-qualifying purchases totaled 587,000 for Scenario A and 361,000 for Scenario B.

[66] It should be noted that the GSE loan-to-value data may not always be a good indicator of the cumulative loan-to-value (or inversely, the borrower's downpayment). For example, as part of their affordability initiatives, the GSEs purchase first-lien loans that have been combined with "soft seconds"; in these cases, the borrower's downpayment is less than indicated by the inverse of the loan-to-value ratio. Unfortunately, data are not available on these situations.

Table 3.12a
Projected Additional GSE Purchases of Home Loans Under the Home Purchase Subgoals: Scenario A
Both GSEs

	2005-2008							
	Additional First-Time Homebuyers Purchases				All Additional Purchases			
	All	90%+ LTV*	95%+ LTV	Minority	All	90%+ LTV*	95%+ LTV	Minority
Special Affordable	93,202	47,795	27,363	36,451	**218,541**	81,950	37,822	66,088
Low- Mod	130,559	65,882	35,634	49,445	**327,248**	120,917	51,293	95,566
Underserved Areas	110,196	58,307	31,005	51,345	**276,263**	110,644	44,494	104,350
Additional Purchases**	150,620	73,848	37,869	57,804	**399,395**	142,922	55,689	119,759

* Includes 90 percent and greater LTVs.

** Additional purchases is not the sum of the above three rows since a single loan purchase may qualify for more than one goal. See text for more explanation.

Table 3.12b
Projected Additional GSE Purchases of Home Loans Under the Home Purchase Subgoals: 0.975 Scenario A
Both GSEs

	2005-2008							
	Additional First-Time Homebuyers Purchases				All Additional Purchases			
	All	90%+ LTV*	95%+ LTV	Minority	All	90%+ LTV*	95%+ LTV	Minority
Special Affordable	130,301	66,987	38,294	51,082	**303,149**	114,153	52,419	91,970
Low- Mod	205,998	102,738	54,024	75,648	**525,477**	191,360	77,720	147,873
Underserved Areas	168,787	88,665	46,249	77,388	**424,527**	168,780	65,937	157,404
Additional Purchases**	236,512	114,843	57,277	88,179	**634,469**	224,474	84,002	183,653

* Includes 90 percent and greater LTVs.

** Additional purchases is not the sum of the above three rows since a single loan purchase may qualify for more than one goal. See text for more explanation.

Poor credit is being increasingly recognized as a major barrier to homeownership. Earlier, Table 3.8 presented some illustrative results based on a small sample of credit data for 12 metropolitan areas. Tables 3.13a and 3.13b continues that analysis by presenting a breakout of the additional purchases by credit (FICO) score. Of the 399,395 additional loans under Scenario A, 89,666 (or 22.5 percent) would have a borrower FICO score less than 660. Note, however, that 216,518 (or 54.2 percent) would also have a borrower FICO score greater than 720. As discussed in Chapter IV, compared with the non-GSE portion of the market, the GSEs appear to have been cautious with respect to purchasing loans for borrowers with poor or blemished credit. As explained in Chapter IV, the GSEs have used their automated underwriting systems and the concept of compensating variables to reduce the risk on loans that they purchase. They argue that this is a prudent way to enter into targeted markets, particularly when compared with traditional methods of underwriting.

TABLES 3.13a AND 3.13b

The above estimates of the numbers of first-time homebuyer, low-downpayment, and minority loans to be purchased by the GSEs are driven by their past patterns of purchasing for the housing goals. As shown in Table 3.7, the GSE goals-qualifying loans have had higher proportions of first-time homebuyer, low-downpayment, and minority loans than non-goals-qualifying loans. In fact, this mechanism—the goals being correlated with groups that face credit constraints—is how the housing goals increase credit access and homeownership opportunities. However, as also shown in Table 3.7, most of the GSEs' goals-qualifying-loans do not fall into these three groups. This is not totally unexpected, given findings from Chapter IV that the GSEs lag far behind the conventional conforming market in purchasing first-time homebuyer loans. In other words, if the GSEs had relied more heavily on first-time homebuyer loans to meet the housing goals in the past, the projection methodology would suggest more first-time homebuyer loans would be included in the additional purchase calculations. Of course, the higher housing goals should encourage the GSEs to reach out to groups such as first-time homebuyers. In fact, there are situations where the GSEs would have to deviate from their past purchase patterns in order to reach the new home purchase subgoals. If the types of goals-qualifying home loans that the GSEs have relied on in the past to meet the housing goals are not readily available in the non-GSE portion of the market, then the GSEs would have to purchase different types of loans, such as more first-time home buyer loans or more low-downpayment loans.

While there could be several impacts of the additional GSE purchases, reduced interest rates for those lower-income borrowers who receive GSE loans under the new housing goals (as compared with the interest rates that they would have received without the expanded GSE outreach under the new housing goals) will likely be the main effect. These transfers to borrowers would come from the stockholders of lenders losing business and from the GSEs to the extent that they accept a lower return on equity on these loans. The additional single-family purchases are expected to total $20.750 billion in 2005, $39.000 billion in 2006, $50.750 billion in 2007, and $76.750 billion in 2008.

Table 3.13a

Illustrative Example: Projected Additional GSE Purchases of Home Loans by Credit Scores*: Scenario A Both GSEs

	2005-2008				
	FICO Scores				
	0 - 620	621 - 660	661 - 720	721 +	Total
Special Affordable	34,052	19,169	49,587	115,734	218,541
Low- and Moderate-Income	47,028	28,722	75,096	176,402	327,248
Underserved Areas	42,779	26,320	67,921	139,243	276,263
Total Additional Purchases**	54,483	35,183	93,211	216,518	399,395

*The distribution of additional purchases across FICO scores is based on the FICO score distribution of GSE purchased loans between 1998 and 2000 for 12 Metropolitan Areas; see Table 3.5 for cautions concerning these data.

**Additional Purchases is not the sum of the above three rows since a single loan purchase may qualify for more than one goal. See text for more explanation.

Table 3.13b

Illustrative Example: Projected Additional GSE Purchases of Home Loans by Credit Scores*: 0.975, Scenario A Both GSEs

	2005-2008				
	FICO Scores				
	0 - 620	621 - 660	661 - 720	721 +	Total
Special Affordable	47,710	26,896	69,080	159,463	303,149
Low- and Moderate-Income	73,643	46,115	120,782	284,938	525,477
Underserved Areas	64,996	40,697	104,805	214,029	424,527
Total Additional Purchases**	84,981	55,806	148,242	345,440	634,469

*The distribution of additional purchases across FICO scores is based on the FICO score distribution of GSE purchased loans between 1998 and 2000 for 12 Metropolitan Areas; see Table 3.5 for cautions concerning these data.

**Additional Purchases is not the sum of the above three rows since a single loan purchase may qualify for more than one goal. See text for more explanation.

Under the assumption that borrowers' interest costs are reduced by 25 basis points, the present value of these transfers to borrowers (assuming an average five-year holding period and a discount rate of 3 percent) would be $98 million in 2005, $184 million in 2006, $239 million in 2007, and $362 million in 2008. Alternatively, if borrowers' interest costs are reduced by 50 basis points, the present value of the transfers to borrowers would be $196 million in 2005, $368 million in 2006, $479 million in 2007, and $724 million in 2008.

Share of Non-GSE Market. A first indicator of whether the GSEs can rely on their past purchase patterns is to examine the size of the non-GSE portion of each goals-qualifying market relative to the required additional GSE purchases. For example, if the additional special affordable loans needed to meet the subgoal and goal targets account for a large percentage of the non-GSE special affordable market (defined as the total special affordable originations minus the GSEs' baseline special affordable purchases), then the GSEs may have to deviate from past purchase patterns by reaching deeper into the market, possibly loosening their underwriting standards in order to attract enough borrowers that qualify as special affordable. On the other hand, if the additional GSE purchases account for a small or moderate percentage of the remainder of the market, then the GSEs will probably be able to meet their goal targets with the same types of goals-qualifying loans that they have purchased in the past (as reflected in Table 3.7).

Before proceeding, it should be noted that focusing solely on the non-GSE portion of the conventional conforming market (as the following analysis does) is somewhat restrictive, given that there could be an expanding market due to the GSEs' outreach; in addition, some of the GSEs' additional purchases could be borrowers who otherwise would have received an FHA loan. Still, the non-GSE portion of the conforming market provides a reasonable benchmark for examining feasibility and market issues.

The analysis in Section C.4.e suggested that the additional GSE purchases don't begin to pick up until the out years of 2007 and 2008. Thus, the 2005-2006 goals and subgoals are not likely to cause any significant reduction in the GSEs' profits or any significant increase in costs due to higher defaults. As explained in Chapter 6, the return on equity for the additional goals-qualifying loans is projected to be lower than that for the GSEs' standard business, but not by much. The GSEs have earned profitable returns on their goals business, and based on the above analysis of the additional 2005-2006 purchases as a share of the non-GSE market, there is no reason to expect any significant reduction in financial returns or any significant increase in mortgage defaults and losses. This is because the GSEs, and particularly Fannie Mae, can meet the new 2005-2006 goals by without substantially changing their product offerings and underwriting standards—there are plenty of goals-qualifying loans (both seasoned and newly-originated) for the GSEs to purchase to meet the new goals.

The housing goals for the out-years aim to move the GSEs toward the market, while the home purchase subgoals for these years move the GSEs' into a true leadership position in the home loan market. Therefore, a useful starting point for examining GSE additional purchases as a share of the remaining non-GSE market is 2007. For each goals category, the following are estimates of (a) the additional 2007 GSE goals-qualifying purchases of SFO loans under Scenario A divided by (b) the non-GSE portion of the market, calculated by subtracting the GSEs' baseline purchases from total market originations: (1) 14.3 percent for special affordable, (2) 8.7 percent for low-mod, and (3) 7.8 percent for underserved areas.[67] These results suggest that the additional goals-qualifying purchases will not require the GSEs to loosen their underwriting standards in a manner that requires them to take on any undue risk. Rather, as was emphasized in the rationale for the goals and subgoals, there appear to be goals-qualifying loans for the GSEs to purchase in the remainder (non-GSE portion) of the market. As noted above, this is particularly the case for important categories such as first-time homebuyers, where the GSEs account for a relatively small portion of the market. Under the 0.975 Scenario A, the SFO remainder of the market percentages for the 2007 goals and subgoals would be: (1) 18.9 percent for special affordable, (2) 13.2 percent for low-mod, and (3) 11.4 percent for underserved areas. Again, these shares suggest the additional purchases would be feasible; the only caveat, as discussed earlier, is that most of the additional purchases (e.g., 70 percent of the additional special affordable purchases) are concentrated in one GSE, Freddie Mac.

[67] The results reported in the text have been adjusted to exclude the GSEs' purchases of seasoned prior-year mortgages. That is, not all of the GSE baseline purchases nor all of the GSE additional purchases will involve newly-originated mortgages, as one strategy the GSEs have used to meet the housing goals involves their purchasing targeted seasoned loans. In this non-GSE-market-share analysis, two methods were used to adjust the GSE data. Under Method 1, the GSEs' purchases of seasoned loans were excluded from both their baseline and additional purchase figures, prior to subtracting the GSE purchase data from the market data. A "seasoned mortgage" is a mortgage that was originated 365 days prior to the loan being purchased by the GSE. For each housing goal category, the average seasoned loan percentage for the two most recent home purchase years (1999 and 2000) was used; taking the average over the 1999-2001 period yielded similar results. The average seasoned loan percentage was calculated using both GSEs' data. The seasoned-loan shares are not reported here because seasoned loan data are proprietary. Under Method 2, the GSEs' purchases of mortgages originated during January-September of the immediate prior year were excluded the baseline and additional purchase figures, as well as all mortgages originated two or more years from the current year. (It could be argued that loans originated during October-December of the immediate prior year are pipeline loans and thus it would be inappropriate to treat them as part of the GSEs' seasoned loan strategy.) These prior-year percentages for the housing goal categories were overall GSE averages for 1999-2000. The text reports the results for Method 1, which is based on the more traditional definition of seasoned loans. Method 2 resulted in slightly more prior-year loans being deducted from the GSEs' baseline and additional purchase figures, which led to the GSEs' additional goals-qualifying purchases being slightly higher shares of remaining, non-GSE market. It is recognized that many of the GSEs' prior-year loans are originated in the previous calendar year (rather than, say, two, three or four years ago), which means that these adjustments would be reduced if the analysis was conducted on a two-year basis, for example. Still, using these seasoned-loan percentages is a reasonable starting point for measuring the share of the non-GSE conventional conforming market accounted for by additional goals-qualifying purchases. As mentioned in the text, the GSEs could also purchase loans outside the conventional conforming market (i.e., FHA loans) in order to satisfy the new housing goal targets; this would offset any understatement of the impact on the non-GSE conventional conforming market due to the exclusion of prior-year GSE data in the analysis that follows in the text.

The 2008 goals, as well as the 2007 goals, will require increases in purchases, particularly for Freddie Mac. To meet these goals, Freddie Mac could choose an entirely different strategy than suggested by HUD's purchase simulation model, for example, a strategy possibly involving fewer loan purchases (e.g., by focusing on loans that meet multiple goals). Even with this caveat, however, it appears that the out-year goals will require a significant increase in additional purchases by Freddie Mac. Given the size of the required 2007 and 2008 additional purchases (see Section C.4.e), Freddie Mac (as well as Fannie Mae, particularly in 2008) would likely have to begin to alter their purchase patterns, as they sought to attract more goals-qualifying loans. Thus, the characteristics of the additional loans may differ from those reported above—for example, there could be more first-time homebuyer loans since that is a part of the market when there is ample room for the GSEs to improve. This suggests that the data reported in Tables 3.12a-3.13b may be minimal estimates.

Earlier, the goals-qualifying purchases of SFO loans needed to meet the 2007 goals and subgoals were expressed as a percentage of the non-GSE portion of the market, the latter calculated by subtracting the GSEs' baseline purchases from market originations. These percentages are an indicator of how far into the market the GSEs would have to go in order to meet a given set of housing goals. The percentages for 2008 under Scenarios A and B are as follows (with Scenario B percentages in parentheses): (1) 26 (21) percent for special affordable, (2) 13 (10) percent for low-mod, and (3) 12 (9) percent for underserved areas.[68] [69] The larger number of additional purchases under the 2007 and 2008 goals (as compared with the 2005-2006 goals) would require the GSEs to reach further into the non-GSE portions of the affordable market. Under the assumptions in this analysis, to meet the 2008 special affordable subgoal, the GSEs would have to purchase one-fifth to one-fourth of newly-originated special affordable loans in the non-GSE portion of the market. And as Section C.4.e made clear, most of these additional purchases are to be made by Freddie Mac, which has a much lower baseline performance than Fannie Mae. Under the two 0.975 Scenarios A and B, the remainder-of-the-market percentages are as follows (with 0.975 Scenario B in parentheses): 32 (26) percent for special affordable, (2) 18 (13) percent for low-mod, and (3) 17 (13) percent for underserved areas. Focusing solely on newly-originated mortgages in the non-GSE portion of the conventional conforming market as the source of new goals-qualifying

[68] The market estimates assume the following averages across both home purchase and refinance loans: 16.9 percent for special affordable, 44.2 percent for low-mod, and 33.0 percent for underserved areas. By comparison, the corresponding percentages for the last two home purchase environments (1999 and 2000) were as follows: 1999 (18.5 percent for special affordable, 45.5 percent for low-mod, and 33.8 percent for underserved areas); and 2000 (19.6 percent for special affordable, 46.8 percent for low-mod, and 36.1 percent for underserved areas). These beginning percentages refer to the entire conventional conforming market. An adjustment within the simulation model deducts B&C loans. While the adjustment is generally one-half, in this case, A-minus loans are assumed to represent two-thirds of the subprime market (i.e., B&C loans are assumed to represent one-third of the subprime market). This seems consistent with one potential strategy that the GSEs might choose to meet the higher housing goals—move deeper into the subprime market.

[69] Under Method 2 (see earlier footnote), the additional GSE purchases in 2008 as a share of the remaining market under Scenarios A and B are as follows (with Scenario B percentages in parentheses): (1) 25 (20) percent for special affordable, (2) 12 (9) percent for low-mod, and (3) 12 (9) percent for underserved areas.

loans for the GSEs, however, does not fully consider the options available to the GSEs. The GSEs could attract borrowers from the government (e.g., FHA) sector as well as new entrants into the homeownership market. They could also go deeper into the subprime market, or further into markets that are not fully included in this analysis such as manufactured housing. The LTV and FICO score data reported in Tables 3.7 and 3.8 indicated that a large portion of the goals-qualifying loans purchased by the GSEs are very low-risk loans (that is, have low LTV and/or a high FICO score). These data suggest there is room for both GSEs to move deeper into the lower-end of the market. As explained in Section C.4e, Freddie Mac could also transform its business to look more like Fannie Mae's business, with an increased emphasis on financing rental housing.

The new housing goals are designed to give the GSEs time to improve their performance. Thus, the GSEs' performance on the year-2008 goals should benefit from their experience meeting the 2005-2007 goals. In 2008, the home purchase subgoals for low-mod and special affordable loans are set at their 2007 levels while the overall goals go up as follows: special affordable (from 25 percent in 2007 to 27 percent); and low-mod (from 55 percent in 2007 to 56 percent). Between 2007 and 2008, both the underserved areas subgoal (from 33 percent to 34 percent) and the overall goal (from 38 percent to 39 percent) increase. Under Scenario A (B), Freddie Mac would have to purchase an additional 166,745 (114,745) SFO loans and increase its multifamily purchases by 33 (28) percent and its single-family rental purchases by 24 (18) percent in order to meet the 2008 goals. Thus, even though only one of the subgoals (i.e., the underserved area subgoal) is increased in 2008, Freddie Mac will likely purchase additional goals-qualifying single-family loans (both home purchase and refinance loans) in order to meet the overall housing goals, as well as additional loans on rental properties. It is possible that Freddie Mac's baseline multifamily mix will be higher by 2008. If Freddie Mac's baseline multifamily mix is 12 percent, its additional single-family purchases will fall.

Tables 3.12a-3.13b give the characteristics of the additional purchases. However, given the large increases in goals-qualifying purchases under the subgoals and goals for 2008, it is not clear that the GSEs (and particularly Freddie Mac) could rely on their past purchase patterns to reach the new targets. Whether the GSEs could meet the 2008, as well as the 2007, targets with their currently improving efforts (e.g., new programs and products, targeted purchases of seasoned loans, moving into special markets such as subprime lending) without loosening their underwriting standards in any significant way is unclear. Freddie Mac, in particular, has to increase its goals purchases (including home purchase loans, refinance loans, and multifamily loans) much more than Fannie Mae. As noted above, the GSEs' purchases of SFO mortgages in metropolitan areas under the 2007 and 2008 targets represented significant portions of the non-GSE special affordable market, in particular.

The earlier discussion concluded that the 2006-2005 goals and subgoals would not likely cause any significant reduction in the GSEs' profits or any significant increase in costs due to higher defaults—they would continue purchasing goals-qualifying loans that resembled the types of loans they have purchased in the past. Over time, the purchase requirements on the GSEs will increase, particularly in 2007 and 2008 for Freddie Mac. If these goals and subgoals required the GSEs to significantly loosen their underwriting standards, there could be some reductions in their returns on equity (ROE) for the additional purchases. Chapter 6 reports returns on equity for additional purchases of goals-qualifying loans where the conditional default rates are increased and proceeds from "real estate owned" (REO) by the GSEs subsequent to defaults are decreased for low-income loans and loans secured by properties located in underserved areas. These adjustments are intended to simulate a hypothetical degradation in loan performance in the event the GSEs need to adopt less restrictive underwriting standards in order to comply with the housing goals regulations. These "adjusted" simulations may be more appropriate for the 2007-08 targets than the "unadjusted" simulations (which serve as the base case in Chapter 6).

In the adjusted simulations, baseline default rates are multiplied by 1.5 if the loans are classified as low-income or in an underserved area; baseline default rates for low-income loans in underserved areas are multiplied by 2.25 (or 1.5 squared). Three economic scenarios are considered: #1 (4 percent house price appreciation); #2 (2 percent house price appreciation; and #3 (minus 2 percent house price appreciation). Tables 6.10 and 6.11 in Chapter 6 report the average lifetime cumulative default rates corresponding to each of the loan portfolios (Fannie Mae and Freddie Mac, respectively) and economic scenarios underlying the ROE results in Tables 6.8 and 6.9.

Under Chapter 6's economic scenario 1 (4 percent house price appreciation), the return on equity of additional SFO goals-qualifying loans is slightly below the return on equity for baseline loans (28.4 percent for additional purchases versus 31.4 percent for baseline purchases).[70] Under the "adjusted" simulations (again assuming economic scenario 1), the ROE of additional SFO goals-qualifying loans falls to 22.1 percent, or six percentage points less than the ROE of 29.1 percent for baseline purchases in this "adjusted" simulation. The ROEs between additional and baseline purchases show even wider gaps under the alternative economic scenarios, reflecting the even higher propensity of goals-qualifying loans to default during more stressful economic conditions. The three economic scenarios produce substantially different loan performance outcomes, and these are magnified under the results for the adjusted default rate models in the bottom panel of each table. For example, the unadjusted cumulative default rate for Fannie Mae's baseline (additional) purchases is 0.81 (1.10) percent under economic scenario 1, compared with an adjusted cumulative default rate of 1.04 (1.84); on the other hand, under economic scenario 3, the unadjusted cumulative default rate for Fannie Mae's baseline (additional) purchases is 3.93 (5.42) percent, compared with an adjusted cumulative default rate of 4.88 (8.39) percent. Freddie Mac's data show similar results. Thus, one effect of the higher goals levels would likely be an increase in default rates and a reduction in the ROE on additional purchases to satisfy the goals.

[70] These ROEs represent unweighted averages of Fannie Mae (see Table 6.8) and Freddie Mac (see Table 6.9) data.

However, from the perspective of the GSEs' financial returns, it is important to keep two things in mind. First, although single-family default rates on additional targeted lending are significantly greater than default rates on baseline purchases under the most stressful scenarios, this does not translate directly into the same relative differences in ROE values because of higher GSE guarantee fees and higher mortgage insurance coverage ratios on high LTV loans (compare the default and ROE tables in Chapter 6). While pressure to meet the higher 2007-2008 housing goals could make it more difficult to increase guarantee fees, the GSEs have always been adept at protecting their financial returns as they have moved into the affordable end of the market. Second, even in the case of a significant decline in the ROEs for targeted loans, these additional goals-qualifying purchases, although large and significant, still account for only a relatively small share of the GSEs' overall business. For example, consider the above example of a 22.1 percent ROE on additional goals-qualifying loans versus a 29.1 percent ROE on baseline purchases. The additional goals-qualifying loans received their largest dollar weight in 2008—2.3 percent for Fannie Mae and 6.8 percent for Freddie Mac under Scenario A. Thus, in this example, the weighted average ROE would be 28.3 percent for Freddie Mac.[71] Similar calculations can be done for the various "Baseline" and "Additional" ROEs reported in Tables 6.8 and 6.9 of Chapter 6. Thus, it appears that the GSEs will continue earning ample returns on equity under the higher housing goals. Based on their experience purchasing goals-qualifying loans over the past 10 years, and based on the financial returns associated with these loans, there is no reason to believe that the GSEs will not continue earning more than reasonable returns.

Additional Analysis. The above discussion has focused mainly on a home purchase environment characterized by affordable interest rate conditions, as proxied by goals-qualifying percentages for home purchase loans from 2002 (i.e., Scenario A). While this is the type of market that is expected during the 2005-2008 period, recent experience suggests that market conditions can change. This section briefly examines two other environments—a moderately less affordable home purchase environment and a refinance environment.

The home purchase environment described above (12 and 10 percent multifamily mixes for Fannie Mae and Freddie Mac, respectively) was adjusted first by reducing the SFO home purchase and refinance percentages by a factor of 0.975, which was defined as 0.975 Scenario A and 0.975 Scenario B. (Examples for a 0.950 Scenario B were also shown in the baseline Tables 3.9 and 3.11a.) This will have two effects. First, the baseline goals shares for each GSE will be reduced, which will call for additional purchases to meet the goal and subgoal targets. Second, the additional purchases will represent a higher share of the non-GSE part of the goals-qualifying market, which has also been reduced by 0.975. In this case, meeting the goals will be more of a challenge for Fannie Mae and Freddie Mac. As an example, consider the housing goals for 2007. In this case, the additional purchases of SFO loans increased from 163,000 to 251,000. The GSE purchases as a share of the non-GSE market increased from 14 to 19 percent for the special affordable market, for example. A further discount (e.g., 0.950) would yield

[71] Obtained by multiplying (0.068 times 22.1) and adding the result to (0.932 times 29.1).

even larger additional purchase requirements. Because of the discount factor, both Fannie Mae's and Freddie Mac's baselines for the home purchase subgoals are reduced, leaving them further short of the three subgoal targets. While the specific numbers may vary depending on how the GSEs responded to such an environment, this scenario is illustrative of the types of challenges that the GSEs could face under less favorable affordability conditions. However, as discussed in Appendix D of the Final GSE Rule, the affordable lending market has shown an underlying strength over past few years, which means that the special affordable, low-mod, and underserved areas shares of the home loan market are unlikely to fall much, unless there is a serious deterioration in interest rate conditions. It should also be pointed out that if single-family origination volume falls, the multifamily share of the market rises. Thus, with respect to the overall goals, this helps offset any decline in SFO baseline performance due to higher interest rates.

A heavy refinancing environment possess a different sort of challenge for the GSEs, as it makes the overall goals more difficult due to a decline in the multifamily mix and a decline in the goals-qualifying share of refinance loans (which account for about two-thirds of the SFO market during a refinancing wave). The home purchase subgoals are less of a problem because of the low interest rates that characterize refinancing environments. The challenge that the GSEs face in a heavy refinance environment can be illustrated by examining their performance during 2001-2003, which were years of heavy refinancing activity:

	2001	2002	2003
Low-Mod			
Fannie Mae	48.7%	47.9%	49.5%
Freddie Mac	47.0%	44.6%	45.3%
Special Affordable			
Fannie Mae	20.1%	19.4%	20.8%
Freddie Mac	19.1%	17.3%	19.0%
Underserved Areas			
Fannie Mae	35.7%	35.0%	34.1%
Freddie Mac	32.5%	32.4%	31.7%

Simulations from the regulatory analysis of the 2004 proposed GSE rule can also be used to show the lower baselines in a heavy refinancing environment:

> The model simulated a refinance environment similar to 2002 and produced baseline results that approximated the GSEs' actual performance that year. Under this scenario, Freddie Mac's baseline housing goal shares are as follows (with the shortfall from the new goal in parentheses): 17.8 percent for special affordable; 45.1 percent for low-mod; and 32.4 percent for underserved areas. Fannie Mae's baseline housing goal shares are as follows: 19.8 percent for special affordable; 47.9 percent for low-mod; and 34.8 percent for underserved areas. Obviously,

these baseline percentages are short of the 2005-2008 goals. More moderate refinance environments, with higher multifamily mixes than the 7.5 percent mix assumed here and with higher goals-qualifying percentages for refinance loans, would lead to higher baseline percentages for both GSEs. Still, these baseline shares indicate the challenge that the GSEs face in a heavy refinance environment—in this situation, the challenge relates more to the overall goals rather than the home purchase subgoals.

HUD received a number of public comments seeking a regulatory solution to the issue of the ability of the GSEs to meet the housing goals during a period when refinances of home mortgages constitute an unusually large share of the mortgage market. As explained in the Preamble to the Final Rule, HUD is not addressing the refinance issue in this final rule. Along with the Final Rule in the Federal Register, HUD is publishing an Advance Notice of Proposed Rulemaking that advises the public of HUD's intention to consider by separate rulemaking a provision that recognizes and takes into consideration the impact of high volumes of refinance transactions on the GSEs' ability to achieve the housing goals in certain years, and solicits proposals on how any such provision should be structured and implemented. HUD believes that it would benefit from further consideration and additional public input on this issue. HUD notes that FHEFSSA provides a mechanism by which HUD can take into consideration market and economic conditions that may make the achievement of housing goals infeasible in a given year. (See 12 U.S.C. 1336(b)(e).)

As explained in Appendix D of the Final GSE Rule, 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 suggests 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 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.

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.[72] If HUD has set a goal for a given

[72] Section 1336(b)(3)(A).

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. Still, FHEFSSA and HUD recognize that conditions could change in ways that require revised expectations.

D. Alternative of Higher Housing Goals and Subgoals

Section D of Chapter 3 of the Regulatory Analysis for the 2004 proposed GSE Rule reported the results of an alternative with higher goals and subgoals; specifically, the following alternative considered was the following:

Special Affordable: Goal of 30 percent and Subgoal of 20 percent;

Low- and Moderate-Income: Goal of 59 percent and Subgoal of 48 percent; and

Underserved Areas: Goal of 42 percent and Subgoal of 36 percent.

This alternative would place the GSEs above the market ranges for the overall goals (see Table 3.2a) and significantly above previous market experience on the home purchase subgoals (see Table 3.2b). The arguments against these higher goal alternatives deal primarily with the fact that they are substantially above the GSEs' actual performance levels of recent years, raising questions about the reasonableness and feasibility of attaining such goal and subgoal levels within the time frame covered by this final rule without necessitating wrenching adjustments in the structure of the GSEs' businesses. Extensive business adjustments would be difficult for the GSEs to accomplish in too brief a period. This consideration argues for the staged annual adjustments to the goals, as established in the Final Rule. After experience has been gained with the proposed 2005-2008 goal levels, it could then be considered whether further adjustments would be reasonable, along the lines of the higher alternative.

During the development of this Final Rule, the Department lowered the overall goals as follows: Special Affordable, 28 percent to 27 percent; Low-Mod, 57 percent to 56 percent; and Underserved Areas, 40 percent to 39 percent. This change was made to be consistent with the one-percentage-point drops in the top-end of the three corresponding market ranges. Appendix D to the Final Rule discusses this in detail.

E. Alternative of Leaving Goals as They Are and Excluding Subgoals

With regard to the **Low- and Moderate-Income Goal**, one alternative for 2005-08 is to leave the goal at the 2004 level of 50 percent. This is the goal that was also in effect for 2001-03, although the bonus points for both GSEs and Freddie Mac's temporary adjustment factor expired at the end of 2003. Such a goal might still require increased effort for both GSEs, since Fannie Mae's performance, measured on this basis, averaged 48.7 percent over the 1999-2003 period, and exceeded 50 percent only in 2000, when it was 51.2 percent. Similarly, Freddie Mac's performance, measured on this basis, averaged 46.6 percent over the 1999-2003 period, and it also exceeded 50 percent only in 2000, when it was 50.2 percent.

However, a low-mod goal of 50 percent would not represent a reasonable and appropriate share of the GSEs' business. See Section C.2 which provided the rationale for increasing the housing goals. A low- and moderate-income goal of 50 percent would be well below the average low-mod share of the conventional conforming market over the past four years. Goals set at the 50 percent level would be inconsistent with the legislative history of FHEFSSA, which calls for goals such that "the enterprises will need to stretch their efforts to achieve them."[73] With respect to encouraging the GSEs to lead the market, it should also be noted that a goal of 50 percent would be below Freddie Mac's performance of 50.2 percent in 2000, and also below Fannie Mae's peak performance of 51.2 percent in the same year.[74]

With regard to the **Underserved Areas Goal**, the no change alternative would be a goal of 36 percent. For 2004 the goal is 31 percent, but converting this to a goal based on 2000 census data would yield a goal of 36 percent. The 2004 goal of 31 percent was also in effect for 2001-03, although the bonus points for both GSEs and Freddie Mac's temporary adjustment factor expired at the end of 2003. Fannie Mae's performance, measured on this basis, averaged 34.8 percent over the 1999-2003 period, and exceeded 36 percent only in 2000, when it was 37.5 percent. Similarly, Freddie Mac's performance, measured on this basis, averaged 32.5 percent over the 1999-2003 period, and it was below 36 percent in all four years. However, as for the low-mod goal, an underserved areas goal of 36 percent would not represent a reasonable and appropriate share of the GSEs' business. As noted above, the expanded number of census tracts qualifying as underserved based on the 2000 Census geography required that HUD increase the goal target. A goal of 36 percent does not seem appropriate, given the significant credit needs in underserved areas (see Appendix B of the Final GSE Rule) and given that it would be much below the market performance.

With regard to the **Special Affordable Goal**, the no change alternative would be continuation of the goal for 2005-08 at the 2004 level of 20 percent. This is the goal that was also in effect for 2001-03, although the bonus points for both GSEs and Freddie Mac's temporary adjustment factor expired at the end of 2003. Measured on this basis, Freddie Mac's performance averaged 18.7 percent over the 1999-2003 period, and it exceeded 20 percent only in 2000, when it was 20.8 percent. However, as for the other

[73] Senate Report No. 102-282, 102d Cong., 2d Sess., at 35 (1992).

[74] These goal percentage exclude the effects of bonus points and its temporary adjustment factor, but include changes reflecting data from the 2000 Census and other counting rules that took effect in 2001.

two goals, a special affordable goal of 20 percent would not represent a reasonable and appropriate share of the GSEs' business. A special affordable goal of 20 percent would be well below the special affordable share of the conventional conforming market over the past four years. Similarly, a special affordable goal of 20 percent would also be below the projected special affordable market share range of 23-27 percent, as detailed in Appendix D of the final rule—the low end of this market share range reflects housing market conditions that are much less affordable than have existed recently. And a 20 percent goal would not be much of a challenge for Fannie Mae, since its performance, measured on this basis, averaged 20.1 percent over the 1999-2003 period, and exceeded 20 percent in 2000 (when it was 21.7 percent), 2001 (when it was 20.1 percent), and 2003 (when it was 20.8 percent).

In the home purchase environment characterized by scenario A, Freddie Mac's (Fannie Mae's) baseline goals performance was as follows: 21.0 (24.3) percent for special affordable, 51.4 (55.0) percent for the low-mod goal, and 34.9 (38.6) percent for the underserved areas goal. Thus, under these assumptions, Freddie Mac could reach the existing goals with few additional purchases. Fannie Mae's baseline purchases would exceed the goal levels, thus not requiring any additional purchases.

F. Other Issues

F.1. Multifamily Market and Special Affordable Multifamily Subgoal

Fannie Mae and, especially, 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 annual volume of 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 $11.8 billion in 2001, $13.3 billion in 2002, and $21.6 billion in 2003. Freddie Mac's return as a major participant in the multifamily market was an important factor in the improvement in its performance on the Low- and Moderate-Income Housing Goal, as shown in Figure A.1 of Appendix A of the Final Rule, and it mitigates an impediment to higher goals for both GSEs. Concerns regarding Freddie Mac's multifamily capabilities no longer constrain their performance with regard to the housing goals. 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 and over $18 billion in 2001 and 2002, and to $33.3 billion in 2003.

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 Goals, since a very high percentage of multifamily units have rents which are affordable to low- and moderate-income and special affordable families. 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. These goals will create new opportunities for the GSEs to further step up their support of mortgages on properties with rents affordable to low- and moderate-income families.

Background for the Multifamily Special Affordable Subgoal. The initial purpose of the multifamily special affordable subgoal was to ensure some minimum level of GSE multifamily loan purchases targeted at the very-low-income end of the rental market. The final rule would continue the requirement for purchases of multifamily special affordable mortgages. For 2001-2004 the requirement is that such purchases comprise an amount at least equal to 1.0 percent of the GSE's 1997-99 average volume of mortgage purchases—this equates to $2.85 billion annually for Fannie Mae and $2.11 billion annually for Freddie Mac. These goals were set at a very low level in 1995 ($1.29 billion annually for Fannie Mae and $0.99 billion annually for Freddie Mac for each year, 1996-2000), due to Freddie Mac's very small multifamily purchase volume in the early 1990s, and they were increased only modestly in 2000.

Level of subgoals. The final rule establishes the Special Affordable multifamily subgoals at 1.0 percent of the average annual dollar volume of each GSE's combined (single family and multifamily) 2000-02 mortgage purchases for each year from 2005 through 2008. In dollar terms, the multifamily subgoals for the two GSEs are:

Fannie Mae: $5.49 billion per year

Freddie Mac: $3.92 billion per year

These 2005-2008 subgoals represent increases of approximately 90 percent for Fannie Mae and Freddie Mac above the levels that prevailed in 2001-04—$2.85 billion for Fannie Mae and $2.11 billion for Freddie Mac. These subgoals are reasonable or even conservative, given that special affordable multifamily purchases for Fannie Mae amounted to $7.36 billion in 2001 and $7.57 billion in 2002, and $4.65 billion in 2001 and $5.62 billion in 2002 for Freddie Mac. Appendix C of the final rule further discusses the rationale for the subgoal.

This final rule would continue a provision that any low-income rental unit in a property where at least 20 percent of the units are affordable to especially low-income families—families whose incomes are 50 percent of area median income or less—or where at least 40 percent of the units are affordable to very low-income families will count toward the goal. This provision has a relatively small effect on the GSEs' performance.

Because of the high affordability of multifamily housing, it makes a disproportionate contribution to GSE performance on the special affordable goal. Specifically, in 2002 multifamily units contributed 20 percent of units qualifying toward Fannie Mae's Special Affordable Housing Goal in 2002, but only 7 percent of all units financed by Fannie Mae; the corresponding figures for Freddie Mac are 22 percent of special affordable units and 7 percent of all units financed in 2002.

Industry observers believe that the Special Affordable multifamily subgoal has contributed toward a significantly increased presence by Freddie Mac in the multifamily market, one of the Department's principal objectives in establishing the subgoal. Prior to 1993, following losses on multifamily mortgage loans, Freddie Mac had virtually no multifamily mortgage purchase capacity. The multifamily subgoal was established in 1995 to ensure that Freddie Mac established and maintained some presence in the special affordable portion of the multifamily market.[75] Over the past ten years, Freddie Mac has built new multifamily capacity and has expanded its presence in the multifamily financing market to the point that it purchased $13.3 billion in total multifamily mortgages in 2002.

Fannie Mae was well established in the multifamily mortgage market prior to the establishment of the Special Affordable multifamily subgoal. Fannie Mae's performance has consistently surpassed the subgoal by a wide margin, as noted above.

Alternative Levels for the Multifamily Subgoal. The Department has considered alternative levels for the special affordable multifamily subgoal. Due to the large volume of refinance mortgages in the past few years, HUD considered setting the goals equal to 1 percent of average annual mortgage volume over a four-year period, 1999-2002, rather than a three-year period. This alternative would yield somewhat lower goals than those proposed above—specifically, $4.92 billion per year for Fannie Mae and $3.54 per year for Freddie Mac. These would represent increases over the goals currently in effect of 73 percent for Fannie Mae and 68 percent for Freddie Mac. But these goals would be well below the average level of such purchase in 2001-02—$7.4 billion per year for Fannie Mae and $5.9 billion per year for Freddie Mac.

The Department has also considered higher levels for the special affordable multifamily subgoal. Due to the large volume of the GSEs' purchases of such mortgage in recent years, HUD considered setting the goals equal to 1.2 percent of average annual mortgage volume over the three-year period, 2000-02, rather than 1.0 percent of such average annual volume. This alternative would yield somewhat higher goals than those proposed above—specifically, $6.58 billion per year for Fannie Mae and $4.70 billion

[75] It was anticipated that the overall housing goals, particularly the low-mod goal, would ensure that Freddie Mac would build up its overall multifamily capacity, as it would need multifamily purchases in order to meet the overall goals. In fact, that is what happened.

per year for Freddie Mac. These would represent increases over the goals currently in effect of 131 percent for Fannie Mae and 123 percent for Freddie Mac. But the GSEs purchases of such mortgage volumes might not be reasonable, in light of the record GSE multifamily volumes in the past few years of heavy refinancing activity

Alternative Approach to Setting the Multifamily Subgoal Level. One consequence of the subgoal as proposed above is that, to the extent that the GSEs experience certain fixed transactions costs in each multifamily acquisition, they can attain the special affordable multifamily subgoal with the smallest possible transactions costs by purchasing multifamily mortgages with large unpaid principal balances that have a high proportion of units that qualify for the Special Affordable Housing Goal. This approach, therefore, could have the effect of fostering the GSEs' purchases of loans on large properties with more than 50 units, which are already relatively liquid, at the expense of loans on smaller properties, a sector which has not benefited from same degree of exposure to secondary markets.

A further consequence of the subgoal as proposed above is that a dollar-based goal does not adjust for the effects of inflation over the period of years during which the subgoal is in effect. Thus, the number of mortgages the GSEs would be required to purchase under the subgoal, and the number of units in the associated properties, would both be expected to decrease over the goals period. For example, the rise in multifamily property values over the 1996-2002 period contributed to an increase in per-unit loan amounts in the GSEs' multifamily special affordable purchases of approximately 15 percent, and a commensurate decrease in the number of units corresponding to the minimum dollar-based purchase volume required under the multifamily special affordable subgoal. If the loan amount per unit continues to rise, fixed dollar goals over the 2005-2008 period would mean that fewer mortgages, and fewer units, would have to be financed to meet the goal in 2008 than in 2005.

Another consequence of a dollar-based multifamily special affordable goal is that it provides some incentive for the GSEs to finance relatively more expensive, and thus relatively less affordable, special affordable units. That is, if a GSE had a choice between financing 100 special affordable units at an unpaid principal balance of $50,000 per unit or 200 special affordable units at an unpaid principal balance of $20,000 per unit, the former would contribute $5.0 million under a dollar-based subgoal, while the latter would contribute only $4.0 million toward a dollar-based subgoal. Thus the GSE would likely lean toward the former option, since it would contribute more toward the dollar-based subgoal. But the latter option would be preferred if the goal were expressed in terms of a minimum number of special affordable units to be financed annually, since it would result in financing twice as many special affordable units as the former option.

While the final rule specifically proposes a dollar-based subgoal, the Department considered a units-based subgoal as an alternative approach to structuring the Special Affordable multifamily subgoal—a unit-based subgoal. One approach would be to translate the subgoals of $5.49 billion annually for Fannie Mae and $3.92 billion annually for Freddie Mac into unit-based subgoals by dividing these figures by, for example,

$24,101, the average unpaid principal balance per special affordable multifamily unit for the GSEs combined in 2002. This would yield minimum special affordable goals of approximately 228,000 units per year for Fannie Mae and approximately 163,000 units per year for Freddie Mac. These would compare with Fannie Mae's special affordable multifamily acquisition volumes of 287,185 units in 2001 and 280,907 units in 2002, and Freddie Mac's special affordable multifamily acquisition volumes of 252,035 units in 2001 and 249,697 units in 2002. This units-based approach would mitigate some of the potential problems with a dollar-based approach as described above. However, HUD has decided to continue to express the special affordable multifamily subgoal in dollar terms, in order to maintain continuity with the subgoal as specified in previous years.

F.2. Underservice Definition for Metropolitan Areas

As noted above, HUD updated its 1995 and 2000 research on mortgage flows and mortgage denial rates, and the major conclusions of that research remain unchanged. Specifically, HUD has reaffirmed its finding that this goal should target low-income and/or high minority portions of metropolitan areas—specifically, (1) census tracts where minorities comprise 30 percent or more of the residents and the median income of families does not exceed 120 percent of area median income, and (2) census tracts where the median income of families does not exceed 90 percent of area median income. No distinctions are made between underserved census tracts in the central city and suburban portions of metropolitan areas.

In the Final GSE Rule, the underserved census tracts are defined in terms of the 2000 Census rather than the 1990 Census. Switching to 2000 Census data and re-specified MSA boundaries as of June 2003, increases the number of underserved census tracts 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 owner-occupied 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, which was almost twice 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.

One alternative considered in 1995 would have been to include all OMB-designated central cities in the definition of underserved areas, but this would have been much less targeted. Research conducted by HUD, Freddie Mac, and other mortgage market analysts supported the conclusion that central city location had little impact on whether a neighborhood was adequately served or underserved by the mortgage market.

Thus these studies concluded that a tract-based definition was a more effective way to define underserved areas than using entire central cities. No studies since the 1995 rule have questioned these findings of earlier research that defining underserved areas to include all parts of OMB-designated central cities would include many areas that are adequately served by the mortgage market.

For 2005 the Secretary considered alternatives to the definition of underserved areas contained in the final rule. One alternative, also considered in 2000, would be to define such areas using an "enhanced" tract income ratio, and defining qualifying tracts as those with an enhanced tract income ratio at or below 80 percent.

This "enhanced option" would have two parts. First, it would change the definition of tract income ratio from one that is calculated using MSA median income to one that is based on the greater of either the national metropolitan median income or the MSA median income. This approach would ensure that low-income census tracts in low-income MSAs are classified as underserved. With this change, 2,261 tracts would be added as underserved. Second, the enhanced option would lower the maximum income ratio for underserved tracts to 80 percent of "enhanced" income, compared with a tract income ratio of 90 percent of area median income under the current definition. With this change, 2,638 tracts would no longer be classified as underserved areas. The average denial rate of 12.4 percent for the tracts that would be dropped is not much higher than the average denial rate of 11.5 percent for all metropolitan areas. This suggests that these areas are not experiencing severe problems in obtaining mortgage credit. The denial rate for the 2,261 tracts that would be added to underserved under this option is 13.5 percent. The number of tracts that would qualify as underserved areas under this enhanced option is 26,867, with an average denial rate of 16.0 percent, as compared with the 27,252 tracts qualifying under the current definition with an average denial rate of 15.9 percent. Under the "enhanced option," underserved tracts would cover 51.7 percent of owner-occupied housing in metropolitan areas; the current definition covers 51.8 percent of such housing.

Another approach to targeting high denial areas would be to raise the threshold for the definition of a "high-minority tract" from 30 percent to 50 percent of tract population. This option would drop 2,307 of the 26,812 underserved tracts, with an average denial rate of 11.9 percent. These tracts comprised 11 percent of the 2003 mortgage originations in underserved areas. The average denial rate for underserved tracts would increase from 15.9 to 16.6 percent under this alternative option. The impact from removing these tracts from underserved areas is minimal. The current underserved areas goal appears to be targeted and provides a sound basis focusing the GSEs efforts on neighborhoods with credit problems. Therefore, it was decided to continue with the current minority definition.

The final GSE Rule does not adopt either alternative as a definition of underserved metropolitan census tracts. The current definition of underserved areas seems to be doing a good job targeting GSE activities, although it is recognized the GSEs need to continue to improve their purchases in these neighborhoods. The final higher goal percentage of 39 percent and the home purchase subgoal of 34 percent will encourage the GSEs to increase their purchases in low-income and high-minority neighborhoods. Changing the definition might also disrupt the GSEs' marketing, operations, and business strategies for achieving the goals.

F.3. Underservice Definition for Nonmetropolitan Areas

In its 1995 and 2000 rules, HUD defined nonmetropolitan underserved areas in terms of counties, rather than census tracts, as used in metropolitan areas. Specifically, non-metropolitan underserved areas were counties in which (1) minorities comprised at least 30 percent of the residents and the median income of families did not exceed 120 percent of the state nonmetropolitan median income, and (2) the median income of families did not exceed 95 percent of the greater of state nonmetropolitan median income or nationwide nonmetropolitan median income.

In 2000 HUD considered and sought comments on an alternative in which non-metropolitan underserved areas would be defined in terms of census tracts, as in metropolitan areas, rather than counties. In the final 2000 rule HUD did not make this change, thus the county-based definition of underserved areas from the 1995 rule was also in effect for 2001-03.

Based on additional research, HUD is now proposing to follow a tract-based approach, rather than a county-based approach, in defining non-metropolitan underserved areas. The Department is proposing to make this change for 2005-2008 because it believes that a more targeted approach is preferable to the less targeted method followed in 2001-2004, because lenders increasingly rely on computer software which will readily identify census tracts for all properties, and because the current approach counts as underserved some highly affluent areas such as some coastal resort communities in non-metropolitan counties.

Specifically, for 2005-2008, HUD is proposing to define as underserved areas non-metropolitan census tracts in which (1) minorities comprised at least 30 percent of the residents and the median income of families did not exceed 120 percent of the state nonmetropolitan median income in 2000, and (2) the median income of families did not exceed 95 percent of the greater of state nonmetropolitan median income or nationwide nonmetropolitan median income.

For 2005, the Secretary considered several alternatives to the definition of underserved areas in nonmetropolitan (rural) areas.[76] These included whether to retain counties as the basis of definition or change to census tracts, as well as several

[76] HUD has used the general term "rural" to be identical to "nonmetropolitan" to facilitate analysis and to establish workable goals. The Census Bureau's definition of "rural" differs from "nonmetropolitan," but the Bureau's definition would not be readily usable in establishing housing goals. Thus the general terms "rural" and "nonmetropolitan" are used interchangeably herein.

combinations of values of the parameters that define the underserved areas goal. Relative to the current definition based on a 30 percent minority population percentage in the area (whether tract or county) and 95 and 120 percent area median incomes, the following alternatives were considered:

- Change from 95 to 90 percent area median income, retaining the 30 percent and 120 percent thresholds
- Change from 90 to 80 percent area median income, retaining the 30 percent and 120 percent thresholds
- Change from 120 to 110 percent area median income, retaining the 30 percent and 95 percent thresholds
- Change from 120 to 110 percent and change from 95 to 90 percent, retaining the 30 percent threshold
- Change from 30 percent to 50 percent, retaining the 120 and 95 percent thresholds
- Defining the reference median income as the statewide nonmetropolitan median income, instead of the maximum of the statewide or nationwide nonmetropolitan median income as in the current rule.

The effects of six alternatives to the current definition were considered.[77] These alternatives evaluated the following at the tract level: impact of relative socioeconomic, demographic, and housing characteristics in served and underserved areas; dispersion of geographic impact, coverage efficiency, and GSE purchasing performance. While all alternatives resulted in a reduced number of targeted tracts, these areas had relatively greater housing needs, higher minority populations, and weaker socioeconomic conditions than the current definition. However, the resulting served areas would also include a greater number of low-income and minority households. In other words, under the alternative definitions a tradeoff is made between the better targeting of households with greater housing need and the greater number of low-income and minority households that may experience less access to financing since they no longer reside in targeted areas. The net effect of any one of the alternatives does not justify a change to the current nonmetropolitan underserved definitions.

G. Conclusion

Circular A-4 directs agencies to summarize benefit and cost estimates for each alternative, including the qualitative and non-monetized factors affected by the rule. This section presents such a summary.

[77] The analysis is contained in a report to HUD, *Indicators of Mortgage Market Underservice in Non-Metropolitan Areas* by Economic Systems, Inc. (2004).

In Section C.4 of this chapter, impacts of HUD's final rule are compared with impacts of (a) leaving the housing goals at their current levels and not establishing home purchase subgoals baseline, and (b) establishing goals and subgoals at higher levels than under HUD's final rule. The analysis is only illustrative, in view of the discretion left to the GSEs to determine how they will attain the specified goal levels, as well as variability of future market conditions. HUD's analysis was performed under assumptions regarding the "goal-richness" of the GSEs' mortgage purchases and whether the mortgage market environment is relatively more oriented toward originations of home purchase mortgages or refinance mortgages.

Main findings are as follows:

Relative to outcomes if HUD does not increase the goals or establish home purchase subgoals, HUD projects, under one scenario reflecting a home purchase environment, additional GSE purchases over four years of approximately 400,000 home purchase mortgages that qualify under at least one of the housing subgoals. (See Tables 3.12a and 3.13a for further detail.) This analysis assumes a market environment of relatively low refinance volume. Attaining the goals in a high-refinance environment would be more of a challenge for the GSEs given the somewhat lower "goals-richness" of refinance mortgage as compared with home purchase mortgages, and given the lower share of "goals-rich" multifamily loans in a period of heavy single-family refinancing.

Assuming higher levels of the goals and subgoals than under HUD's rule, the projected annual qualifying mortgage purchase volumes are higher, even under the assumption of a home purchase environment. Achieving even higher goals would pose a greater challenge to the GSEs. HUD's analysis questions the feasibility of attaining even higher goals particularly in a high-refinance environment, and particularly for Freddie Mac considering the relatively greater increase in goals-qualifying mortgages necessary for it to attain any specified level of the goals, as compared to Fannie Mae. As was noted, HUD is seeking comments regarding the feasibility of the goals during a heavy refinance environment. With respect to the 2005-2008 goals and other market environments, these goals represent a reasonable challenge for the GSEs, consistent with the statutory factors that HUD must consider in establishing the goals.

This analysis does not address questions of ultimate impacts of raising the goals on market volumes of mortgages with various characteristics of policy impacts, such as low-downpayment mortgages, mortgages originated by minority borrowers, or first-time homebuyer mortgages. Research is needed to determine the extent to which market outcomes in these areas are realized in relation to the housing goals, although it is recognized that such research would be challenging given the difficulty of isolating impacts in a general market context.[78] However, as emphasized throughout this chapter,

[78] For a promising start in such research, see *An Analysis of the Effects of the GSE Affordable Goals on Low- and Moderate-Income Families*, by Thomas Thibodeau, Brent Ambrose, and Kenneth Temkin, U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 2001. Chapter IV and Appendix A of the proposed GSE Rule include a summary of this report.

the types of programs, outreach, and underwriting flexibilities offered by the GSEs are the appropriate vehicles for addressing barriers to homeownership. In addition, the dominant role of the GSEs in the conforming market means that they can play an important leadership role and have major impacts. However, the main issue with respect to the GSEs has always been their aggressiveness in reaching out to the most constrained lower-income and underserved families. The new housing goals and subgoals are intended to increase the GSEs' outreach and service in those families who face the most difficulty obtaining homeownership. In addition, the goals ensure that the GSEs will continue to provide financing support to the affordable end of the multifamily market.