Section I: Introduction

The Cranston-Gonzalez National Affordable Housing Act (NAHA), enacted in 1990, mandated that the Federal Housing Administration's (FHA's) Mutual Mortgage Insurance (MMI) Fund maintain a capital ratio of 2.00 percent starting from October 1, 2000. As defined by NAHA, the definition of the capital ratio is the ratio of the Fund’s capital or economic net worth to its unamortized insurance-in-force (IIF). NAHA also established the requirement for the MMI fund to undergo an annual independent actuarial review.

The purpose of the annual actuarial review is to assess the actuarial soundness of the Fund, and the review for FY 2006 is reported in this document. The analysis estimated the economic value of the MMI Fund as well as the capital ratio to see if the Fund has met the capital standards set forth in NAHA. The analysis was based on the information provided by HUD, such as historical performance of the existing MMI Fund loans, projected future economic conditions, loss-given-claim rates, and projected mortgage originations.

A. Implementation of NAHA

Following the issuance of the fiscal year (FY) 1989 Actuarial Review and the ensuing debate, Congress mandated various changes to the MMI Fund as part of the 1990 Cranston-Gonzalez Act. The required revisions to the MMI Fund focused on four major issues: 1) the development of an actuarial standard of financial soundness, 2) modification of minimum equity requirements, 3) changes in the pricing of insurance premiums, and 4) revisions to policies regarding distributive shares.

The changes called for in the Act were specifically designed to remedy the financial difficulties encountered by the Fund in the 1980s. Each change was intended either to reduce the risks inherent in new books of business or to adjust premiums to more adequately compensate for these risks.

The NAHA legislation required that the Fund be operated on an actuarially sound basis by providing specific capital standards for the Fund and timeframes in which these standards should be met. It also defined the actuarial standard measure as the ratio of the Fund's capital, or economic net worth, to its unamortized insurance-in-force.

To further strengthen the capital position of the Fund, the NAHA legislation linked FHA's ability to pay distributive shares to the actuarial soundness of the entire MMI Fund (as defined in the legislation) rather than solely considering the performance of the loans endorsed during a particular year as was done in the past. This amendment sought to ensure that distributive share payments would not be made if the Fund did not achieve the capital standards established by the
legislation. No distributive shares have been paid since the passage of NAHA. In all our estimates of Fund performance, we followed the current HUD policy and assumed that no distributive shares will be paid even though the capital ratio has met the NAHA mandate.

B. FHA Policy Developments and Underwriting Changes

During the past fifteen years, FHA has implemented several policy changes that affected the financial strength of the MMI Fund. Some of the major changes include revised underwriting guidelines and other policy issues, underwriting adjustable rate mortgages and homeownership counseling, usage of automated underwriting systems, reduction of upfront mortgage insurance premium and related changes, and increases in the maximum mortgage limits. Each of these developments is summarized below.

1. Revised Underwriting Guidelines and Other Policy Issues

In 1995, FHA introduced several changes in the underwriting guidelines. The purpose of the revisions was to eliminate unnecessary barriers to homeownership, provide the flexibility to underwrite creditworthy non-traditional and underserved borrowers, and clarify certain underwriting requirements so that they are not applied in a discriminatory manner. Some of the changes were as follows:

- Instead of using the previous five-year period to determine the borrower’s income stability, the revised policy required that the income can be expected to continue for the first three years of the mortgage for it to be used in qualifying the borrower.
- Overtime and/or bonus income received for less than two years became acceptable, where the lender determines there are reasonable prospects of its continuance.
- Part-time income was recognized, where part-time income refers to income generated by jobs taken in addition to the normal, regular employment to supplement the borrower’s income. The lender must determine that the continuance of this income is reliable and provide a strong explanation for including such income as effective income in qualifying the borrower.
- Only debts extending ten or more months are required to be included in the calculations of debt-to-income ratios. Childcare costs are no longer to be considered in the computation of the debt-to-income ratio, except for court-ordered or voluntary child support payments.
Borrowers who have saved cash at home and are able to adequately demonstrate the ability to continue do so are permitted to have this money included as an acceptable source of funds to close the mortgages.

HUD permits, under most circumstances, a “three repository merged credit report” (TRMCR) rather than a Residential Mortgage Credit Report (RMCR).

While these modifications enabled many additional households to become homeowners, the relaxation of the underwriting rules also lead to an increase in FHA claim rates.

2. Underwriting Adjustable Rate Mortgages and Homeownership Counseling

Several changes were made in 1998 in the underwriting of adjustable rate mortgages (ARMs) and homeownership counseling. The policy revisions addressed the high losses that FHA was experiencing. Based on FHA’s study of ARM claim rates, it was necessary to change the credit policy to maintain actuarial soundness. ARM borrowers now must qualify using the mortgage payment based on the maximum second-year interest rate. This applies to all ARMs with loan-to-value (LTV) equal to or greater than 95 percent. Also, any form of temporary interest rate buydowns for ARMs is no longer acceptable.

Another focus of the 1998 revisions was on homeownership counseling. In the past, first-time buyers receiving counseling were eligible for a reduced upfront FHA insurance premium. While FHA permits funding for approved homeownership counseling programs, unacceptable practices such as borrowers simply being asked to complete homeownership workbooks without any additional interaction with the counseling program were observed. The new rule required that the type of homeownership counseling obtained by the first-time homebuyer must be examined by FHA’s quality assurance staff as part of its regular reviews of the lenders. FHA required that counseling be delivered in a classroom setting, face-to-face, or via electronic media and involve 15 to 20 hours of instruction. Other counseling programs accepted by either Freddie Mac or Fannie Mae also meet this requirement. When upfront premium was reduced in 2001 for all FHA borrowers, there was no longer special benefit for borrowers who went through homeownership counseling programs.

3. Automated Underwriting Systems

In 1998, FHA announced that it approved Freddie Mac’s Loan Prospector (LP) for underwriting FHA insured mortgages. At the same time, FHA made a substantial number of revisions to its credit policies and reduced the documentation requirements for LP-assessed loans, as described in the LP User’s Guide. This was the first time that FHA incorporated automatic underwriting systems (AUSs) in its insurance endorsement process. One year later, in 1999, Fannie Mae’s
Desktop Underwriter (DU) and PMI Mortgage Services’ pmiAURA, and later on, Countrywide Funding Corporation’s AUSs were also approved to underwrite FHA mortgages.

4. Further Reduction in Upfront Mortgage Insurance Premiums

In 2000, in recognition of the continued financial strength and increase in the size of the MMI Fund, FHA revised its Upfront Mortgage Insurance Premiums (UFMIP) policy for all loans closed on or after January 1, 2001. The new UFMIP is 1.50 percent for all borrowers. The eligibility period for UFMIP refunds was shortened to five years for loans endorsed prior to December 8, 2004, and eliminated for loans endorsed after that date except for borrowers who refinance with a new FHA insured mortgage. In the latter case, when the refund can be applied toward the UFMIP of the new FHA-insured loan, the refund eligibility expires after 3 years.

In the past, some FHA borrowers needed to pay annual mortgage insurance premiums throughout the life of the mortgage. The new rule specified that annual mortgage insurance premiums will be automatically canceled for all loans closed on or after January 1, 2001 under the following conditions:

- For mortgages with terms of more than 15 years, the annual mortgage insurance premiums will be canceled when the loan balance reaches 78 percent of the original house price. The mortgagor has to pay the annual mortgage insurance premiums for at least five years.
- For mortgages with terms equal to or less than 15 years and having a loan-to-value ratio of 90 percent or greater, the annual mortgage insurance premiums will be canceled when the loan balance reaches 78 percent of the original house price, regardless of the length of time the mortgagor has paid the annual mortgage premiums.
- For mortgages with terms equal to or less than 15 years and a loan-to-value ratio of 89.9 percent or less, no annual mortgage insurance premium will be charged.

5. Increase in FHA’s Single-Family Loan Limits

In late December 2005, HUD announced the increase of FHA’s single-family loan limits for 2006, in accordance with National Housing Act provisions that allow the national floor and ceiling to adjust with the conforming loan limit. The new maximum insurable single-family loan size in low-cost areas (the “Floor”) is $200,160 and the new maximum insurable amount in

The nationwide mortgage floors for low-cost areas are $256,248, $309,744, and $384,936 for two-, three-, and four-unit mortgage loans, respectively, and the respective statutory ceilings for high cost areas are $464,449, $561,411, and $697,696. These changes became effective starting January 1, 2006.

C. Current and Future Market Environment

1. Interest Rates

According to the Federal Reserve Board statistics, the one-year constant-maturity Treasury yield rose from 3.64 percent on July 1, 2005 to 5.16 percent on July 1, 2006. Similarly, the ten-year Treasury yield rose from 4.18 percent on July 1, 2005 to 5.09 percent on July 1, 2006. These changes produced a flat yield curve. Mortgage interest rates also increased. The average conventional 30-year fixed-rate mortgage commitment rate posted by Freddie Mac increased from 5.70 percent to 6.76 percent between July 2005 and July 2006.

Based on this market-wide trend, Global Insight, Inc. forecasted Treasury yields to remain stable during FY 2007. On the other hand, the mortgage rates are projected to continue to rise rapidly in 2007, and gradually stabilize at the level of 7.21 percent after FY 2010.

2. House Price Growth Rate

Projections of future national average home price growth rates are obtained from the Global Insight June 2006 long-range forecast. According to that forecast, the realized annual growth rate in the national average house price between the first quarter of 2005 and the second quarter of 2006 is about 11 percent, about twice the 5.5 percent projected by Global Insight back in May 2005. The stronger-than-anticipated growth rates in 2005 and into 2006 strengthen the quality of all existing books of business. On the other hand, the projected future growth rate between the third quarter of 2006 and the first quarter of 2008 is only about 2.4 percent, which is less than half of the growth rate projected by Global Insight last year for the same period. This is consistent with the OFHEO’s report that national house price growth has started to slow down. The projected long-term stabilized growth rate is also lowered from last year’s projection of 4.2 percent to 3.7 percent. The slower growth rate in housing prices will negatively affect the strength of new books of business over the coming years, especially for FYs 2006 through 2008.

2 The new loan limit is still subject to the 95 percent of area median house price rule, thus continuing to cause the FHA population to consist of below-median-priced homes.
3. Mortgage Demand

FHA’s market share remained low during FY 2006. The MMI Fund origination volume during FY 2006 estimated by FHA is 5.4 percent lower than that was forecasted in the FY 2005 Review. This reduction in the forecasted future books of business is consistent with the current trend of FHA’s market share. FHA’s market share continued to decrease from 12.22 percent in FY 2002 to an estimated 3.81 percent in FY 2006.

In response to the decreasing market share, the President’s FY 2007 budget proposal included a plan for revitalizing the FHA program. At the time this Review was prepared, the proposal had been passed by the House of Representatives but is still subject to the Senate review. With the uncertainty of the passage of the proposal and the specific provisions of final bill, this Review is prepared with no adjustment for the potential impact of the FHA reform proposal.

With the rising interest rate trend expected to continue over the next few years, future refinance origination share is likely to remain low relative to its peak in FY 2003. The smaller origination volume for new books of business will lead to slower growth in the insurance in force of the MMI Fund. On the other hand, the associated slower prepayment rates in FRMs make the insurance in force of the existing portfolio decrease more slowly, leaving more loans subject to claim risk for a longer time period. As for ARMs, rising interest rates mean higher payment levels in the next few years. If the borrower’s income does not increase as rapidly as the mortgage payments, more ability-to-pay related defaults could occur. However, as long as the house price appreciation rates remain non-negative, most of the income-driven defaults may not lead to claim losses.

Section II presents the impacts of these forecasts on the MMI Fund in greater detail. Section V provides analyses of the fund’s sensitivity to changes in specific economic variables.

D. High Concentration of Loans with Gift Letters in Newer Books

The trend of an increasing share of MMIF insured loans receiving downpayment gift assistance from non-profit organizations continued during this past year. Non-profit organization assisted mortgages now represent about one-quarter of the FY 2005 and FY 2006 books of business. FHA allows a borrower to use outright gifts of cash as downpayment assistance. Eligible gift sources include: relatives, employers or labor unions, tax-exempt charitable organizations, governmental agencies, public entities that have programs to provide homeownership assistance to low- and moderate-income families or first-time homebuyers, or close friends with a clearly defined and documented interest in the borrower. A recent Government Accountability Office
(GAO) report documented that many downpayment gifts provided by non-profit organizations were contributed by the home sellers involved in the specific transactions and possibly with inflated house values. The FY 2005 Review documented that these loans with gift assistances, especially from the non-profit organizations, experienced higher-than-average claim rates. In May 26, 2006, the Internal Revenue Service (IRS) issued a ruling that non-profit organizations that fund downpayment assistance programs with contributions from the property sellers do not meet legal requirements for tax-exempt status. The IRS has started a large number of investigations of organizations involved in such activities. The IRS expects that the non-profit status of all organizations that engage in such activities will be taken away within the next two years. These actions will eliminate this type of high risk loans from future books of business. To take a conservative stand, we assume that the share of these high-risk loans in FHA’s new books of business will steadily diminish over the next three years.

E. Data Sources and Future Projections

The estimates presented in this Review require projections of events more than 30 years into the future. These projections are dependent upon a number of assumptions, including economic forecasts by Global Insight, Inc. and the assumption that FHA does not change its refund and premium policies. Since the assumptions may not be accurate, the actual results will vary, perhaps significantly, from our current projections.

We based our analysis on FHA historical origination, prepayment, and claim data through February 28, 2006. While we have reviewed the integrity and consistency of these data and believe them to be reliable, we have not audited them for accuracy. The information contained in this Review may not correspond exactly with other published analyses that rely on FHA data compiled at a different time or obtained from other data sources.

F. Structure of this Report

The remainder of this report is divided into the following sections:

Section II. Summary of Findings and Comparison with FY 2005 Actuarial Review – presents the Fund's estimated economic value, capital ratio, and insurance-in-force for FY 2006 through FY 2013. This section also provides a reconciliation and explanation of the major differences between the FY 2005 and the FY 2006 Reviews.


1 Internal Revenue Bulletin: 2006-21, by Internal Revenue Service.
Section III. Current Status of the Fund – presents the estimated economic value and capital ratio for the Fund at the end of FY 2006 and provides an analysis of the performance of the books of business from FY 1977 through FY 2006.

Section IV. Characteristics of the FY 2006 Book of Business – describes the FY 2006 book of business and compares the risk characteristics of the current book to those of previous books.

Section V. MMI Fund Sensitivities – presents sensitivity analyses of the MMI Fund using alternative economic assumptions and loan characteristics.

Section VI. Summary of Methodology – presents an overview of the econometric and cash flow models used in the Review.

Section VII. Considerations and Limitations – describes the main assumptions and the limitations of the data and models relevant to the results presented in this Review.

Section VIII. Conclusions – provides a summary of the report's results and the conclusions we draw from those results.

Appendix A. Econometric Analysis of Mortgages – provides a technical description of our econometric model for individual mortgage product types.

Appendix B. Cash Flow Analysis – provides a technical description of our cash flow model.

Appendix C. Data for Loan Performance Simulation – explains the algorithms used to transform the raw data into the data used to simulate future mortgage and Fund performance.

Appendix D. Economic Forecasts – describes the forecast of future economic factors that affect the performance of the Fund and the alternative economic scenarios underlying the selected sensitivity analyses.

Appendix E. Econometric Results – presents claim and prepayment rates estimated from the econometric model.