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 fiscal year (FY) 2007 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 FY 1989 Actuarial Review and the ensuing debate, Congress mandated various changes to the MMI Fund. 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 during the 1980s. Each change was intended to either 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 over 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, or at the discretion of the Secretary of HUD. No distributive shares have been paid since the passage of NAHA even though the capital ratio continues to exceed the statutory minimum. In all our estimates of Fund performance, we assumed continuation of the current HUD policy that no distributive shares will be paid.

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, the acceptability of automated underwriting systems, reduction of upfront mortgage insurance premiums 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 their 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. The major 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 do so are permitted to have this money included as an acceptable source of funds to close the mortgage.

- 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 deemed necessary to change the credit policy to maintain MMI Fund 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 homebuyers 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 homebuyer counseling programs accepted by either Freddie Mac or Fannie Mae also meet this requirement. When the upfront premium was reduced in 2001 for all FHA borrowers, there was no longer a 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 an automatic underwriting system (AUS) 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 CLUES and JP Morgan-Chase Zippy 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 Premium (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 premium 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 premium.

- 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. FHA's Single-Family Loan Limits Remain Unchanged

In early January 2007, HUD announced that FHA's single-family national loan limit ceiling and floor for 2007 remain unchanged at their 2006 levels.[1] The current maximum insurable single-family loan size in low-cost areas (the "Floor") is $200,160 and the current maximum insurable

[1] See Mortgagee Letter 2007-01, January 3, 2007.

amount in high cost areas (the "Ceiling") is $362,790.[2] 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.

C. Current and Future Market Environment

1. Interest Rates

According to Federal Reserve Board statistics, the one-year constant-maturity Treasury yield declined from 5.22 percent in July 2006 to 4.96 percent in July 2007. Similarly, the ten-year Treasury yield declined from 5.09 percent in July 2006 to 5.00 percent in July 2007. These data imply that the yield curve remained virtually flat. Mortgage interest rates also decreased over this period. The average conventional 30-year fixed-rate mortgage commitment rate posted by Freddie Mac declined slightly from 6.76 percent to 6.70 percent between July 2006 and July 2007. However, it is interesting to note that while the 1-year Treasury rate remained stable throughout the past year, both the 10-year Treasury rate and the 30-year mortgage rate showed a drop of about 50 basis points, and then returned to their starting levels. The realized rates were ultimately much lower than those that were forecasted by Global Insight, Inc. back in June 2006 and used for last year's Review.

Based on this market-wide trend, Global Insight forecasted Treasury and mortgage rates to steadily rise up to 2010, remain flat for about three years, then decline and stabilize at 4.81, 5.26, and 6.88 percent for the 1-year Treasury, 10-year Treasury, and 30-year mortgage rates, respectively. Except for the 1-year Treasury rate during the period of FY 2008 to FY 2013, the forecasted interest rates by Global Insight are generally lower than forecasted a year ago. The lower realized and forecasted rate environment tends to introduce higher prepayment rates for FHA-insured loans.

2. House Price Growth Rate

Projections of future national average home price growth rates are obtained from the Global Insight August 2007 long-range forecast. According to that forecast, the realized annual growth rate in the national average house price during 2007 is a *negative* 2.14 percent, compared to the *positive* 2.57 percent projected by Global Insight back in June 2006. The housing market deterioration is forecasted to continue throughout 2008 with a negative 1.17 percent growth rate at the national level. Such a pessimistic forecast of the national housing market implies a

[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 primarily of below-median-priced homes.

dramatic increase in the claim rates of FHA-insured loans in FY 2007 and FY 2008. Furthermore, loans originated in late 2006 through early 2008 will experience immediate price declines, putting many borrowers into negative equity positions. The lifetime claim rate of these loans can be substantially higher than any of the previous books since 1990. On the other hand, the projected future growth rates after 2009 become slightly higher than last year's forecast and have smaller intra-year seasonal fluctuations. Both work in favor of the performance for loans originated after 2009. The change in the view of the housing market future from last year was dramatic, and makes a big impact on this year's Review results.

3. Mortgage Demand

FHA's market share remained low during FY 2007. The MMI Fund origination volume during FY 2007 estimated by FHA is 3.1 percent lower than what was forecasted in the FY 2006 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 13.61 percent in FY 2001 to 3.78 percent in FY 2006 and is estimated to be about 4.23 percent in FY 2007.

In response to the decreasing market share, the Administration has introduced an FHA reform plan to Congress in the President's proposed FY 2007 Budget. As this Review is being written, the proposal is still under the review of the Congress. This Review has made no adjustments for the possible impacts of implementing an FHA reform proposal.

With the rising interest rate trend expected to continue over the next few years, the future FHA streamline refinance origination share is likely to remain low. 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 of FRMs make the IIF 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 monthly payment levels over the next few years. If borrower income does not increase as rapidly as mortgage payments, more ability-to-pay related defaults could occur. When this is compounded by the worsening house price appreciation rates projected by Global Insight for next year, the claim rates of ARM loans could rise considerably. The most recent data also shows that the ARM share in FHA originations went down substantially from 11.5 percent in FY 2005 to 2.9 percent in FY 2006. As a result, even if the claim rates of ARMs rise substantially, the impact to the entire portfolio is likely to be limited.

4. Implications of Recent Problems in the Subprime Mortgage Market

The recent turmoil in the U.S. subprime and "Alt-A" mortgage markets and their deteriorating performance naturally leads to questions about the potential implications for FHA loan performance and the financial safety and soundness of the MMIF. Although FHA loan performance has responded to the changes in the economic environment that are currently affecting subprime loan performance, many of the problems in the subprime market are attributable to the special characteristics of subprime mortgage contracts, differences in underwriting standards for subprime mortgages, a prevalence of higher-risk borrowers with impaired credit, and borrowers less willing or able to verify their income and employment.

There are significant differences in FHA product offerings and underwriting requirements that have helped to insulate the MMI Fund from exposure to many of the risks that now impact subprime and Alt-A lenders and investors. In addition, there are substantial differences in the geographic distribution of FHA loans, due primarily to statutory lending limits on FHA loans; these have limited FHA's exposure to those markets experiencing the most significant declines in house prices. Conversely, some of the higher-priced markets currently experiencing significant house price declines have the highest concentrations of subprime and jumbo mortgages.

Some of the developments that lead to the rapid growth of the subprime and Alt-A markets have also resulted in a decline in the share of the mortgage origination market insured by both FHA and private MI providers. As FHA lost market share to the subprime market, it also experienced a reduction in the relative proportion of FHA loans that are adjustable-rate mortgages (ARMs), thereby reducing a potential source of credit risk and increasing claims as interest rates rise from historically low levels. Furthermore, FHA ARM loans have relatively restrictive annual adjustment caps that protect FHA borrowers against rapid increases in coupon rates and monthly payments. By contrast, increasing shares of the jumbo and subprime markets comprise piggyback loans with second lien components, such as home equity lines of credit that adjust monthly and do not have payment or rate-adjustment caps to smooth the transition to higher rates and to minimize payment shocks. Product offerings in the Alt-A market, such as payment-option ARMs and other loan structures allowing for negative amortization, have exposed lenders to adverse selection by less risk-averse borrowers (i.e., those willing to speculate on continued high house price appreciation and low interest rates). FHA product offerings did not allow for optional payments or negative amortization, thus protecting the MMI Fund against this form of adverse selection. Likewise, single-family investor loans are a large share of the problems in the subprime and Alt-A markets, and FHA does not insure these mortgages.

FHA does not endorse loans for insurance coverage that have limited or no documentation of income and assets, whereas low documentation by the use of unverified stated income and assets have emerged as significant contributors to the deterioration in subprime mortgage performance. Finally, FHA has experienced no obvious deterioration in borrower credit scores among recent loan origination cohorts, whereas borrowers with impaired credit are more likely to secure home-purchase financing in the subprime market.

Based on these considerations, we have concluded that recent developments in subprime markets do not translate directly to added risk for the FHA loan portfolio and the actuarial soundness of the MMI Fund beyond impacts associated with the general slowdown in house price appreciation and potential increases in interest rates, as credit conditions tighten in response to rising mortgage defaults in both prime and subprime markets. These general impacts are reflected in the August 2007 economic forecasts by Global Insight applied to estimate the economic value of current and future FHA mortgage exposures.

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

The share of MMIF-insured loans receiving downpayment gift assistance from non-profit organizations remained high during this past year. Non-profit-organization-assisted mortgages now represent over twenty percent of the entire FYs 2005, 2006, and 2007 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, and close friends with a clearly defined and documented interest in the borrower. A report by the Government Accountability Office (GAO)[3] documented that many downpayment gifts provided by non-profit organizations were contributed by the home sellers involved in the specific transactions, possibly financed by inflated house values. The FY 2005 Review documented that loans with gift assistance, especially from the non-profit organizations, experienced higher-than-average claim rates. In May 26, 2006, the Internal Revenue Service (IRS) issued a ruling[4] that non-profit organizations that fund downpayment assistance programs with contributions from the property sellers will no longer meet the legal requirements for tax-exempt status. However, high volumes of these loans were still endorsed following the IRS announcement. On October 1, 2007, HUD issued a ruling on GAO's Federal Register that prohibits the endorsement of loans that receive contributions from any party that is financially related to the seller of the collateral housing. The rule will become effective after October 31, 2007.

For the base case scenario of this Review, we have assumed that the compounded enforcements by the IRS and HUD rulings will be effective in making loans quickly disappear that receive gift letters from seller-funded non-profit organizations. As this is still an issue under policy discussion, we also prepared a scenario showing the status of the MMI Fund if endorsement of these high-claim-rate loans were to continue.

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[3] "Mortgage Finance Additional Action Needed to Manage Risks of FHA-Insured Loans with Downpayment Assistance," Government Accountability Office, November 2005.
[4] Internal Revenue Bulletin: 2006-21, Internal Revenue Service.

E. Recently Announced New Plans and Initiatives

On August 31, 2007, President Bush announced that FHA will help troubled subprime mortgage borrowers avoid foreclosure through a new *FHASecure* plan. Under this new plan, borrowers that are delinquent on their mortgages as a result of interest rate resets will now be able to refinance using an FHA-insured mortgage. To qualify for *FHASecure,* eligible homeowners must meet the following five criteria:

1. A history of on-time mortgage payments before the borrower's teaser rates expired and the loan reset;
2. Loan interest rates must have or will reset between June 2005 and December 2008;
3. Three percent cash or equity in the home;
4. A sustained history of employment; and
5. Sufficient income to make the mortgage payment.

On September 18, 2007, the House of Representatives passed legislation to modernize the FHA. The FHA modernization initiative includes the following three key changes to the FHA program.

1. Create a new, risk-based insurance premium structure for FHA that would match the premium amount with the credit profile of the borrower.
2. Eliminate the current statutory three percent minimum downpayment, reducing a significant barrier to homeownership.
3. Increase and simplify FHA's loan limits.

Due to time limitations, the potential impacts of these initiatives were not incorporated in the analyses of this Review. Once implemented, the HUD announcements and the pending legislation could have significant impacts on the financial strength of the MMI Fund in the future. It is important, therefore, to monitor the volume, composition, and performance of the next few new books of business to see how changes taking place today might affect the actuarial soundness of MMI programs in the future.

F. 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 may vary, perhaps significantly, from our current projections.

We based our analysis on FHA historical prepayment and claim data through March 31, 2007 and endorsement volume through two additional data extracts by May 31, 2007 and July 31, 2007. 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.

G. Structure of this Report

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

Section II. Summary of Findings and Comparison with FY 2006 Actuarial Review – presents the Fund's estimated economic value, capital ratio, and insurance-in-force for FY 2007 through FY 2014. This section also provides a reconciliation and explanation of the major differences between the FY 2006 and the FY 2007 Reviews.

Section III. Current Status of the Fund – presents the estimated economic value and capital ratio for the Fund at the end of FY 2007 and provides an analysis of the performance of the books of business from FY 1978 through FY 2007.

Section IV. Characteristics of the FY 2007 Book of Business – describes the FY 2007 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 and actuarial assumptions.

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 models 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 procedures used to transform the raw data into the data used to simulate future mortgage and MMI 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.