Section VII: Considerations and Limitations

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. To the extent these or other assumptions are subject to change, the actual results will vary, perhaps significantly, from our current projections.

Furthermore, our analysis is based on an extract of FHA's data warehouse as of February 28, 2006, as well as economic forecast information based on an extract of Global Insight, Inc. as of the end of June 2006. While we have reviewed the integrity and consistency of these data and believe the data to be reasonable, 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.

We identified the following limitations and issues for consideration or possible additional investigative analyses while conducting this Actuarial Review:

- Model responsiveness to changing economic conditions or market regime shifts

    The actuarial models used for this study are based on econometric regression techniques. Several key economic variables incorporated into the actuarial models drive the forecasts of economic values and capital ratios. These models are not time-series models and are therefore dependent upon the forecasts of future values of the economic explanatory variables. The parameter estimates for these models reflect a wide variety of economic conditions over the past 30 years. The model coefficients are reliable only when the existing market and policy regimes remain unchanged. Therefore, the forecasts presented in this study are long-term in nature as is appropriate given the long-term cash flows modeled.

    Short-term variations in MMI Fund claim or prepayment rates are not predicted by these models nor are other variables, such as delinquencies. It is not clear what conditions would cause such short-term variations to have a significant influence on the long-term forecasts. Further study in such short-term variations is challenged by a lack of data availability and data consistency.

- Using the model to predict fiscal-period claims and prepayments

    As discussed above in regard to model responsiveness, the actuarial models used for this study were not intended to predict short-term claims and prepayments for each fiscal period. Additional variables and/or alternative modeling approaches would be more effective to project short-term results. Those additional variables would also need to be

predicted or modeled. Further study of short-term forecasts could be included in future annual actuarial studies to assess the potential for change in the Fund's capital ratio or other adverse indications that might be predicted by short-term variables.

- Projection of concentration and performance of gift loans

  In FY 2005 Review, we pointed out the increasing share and the adverse performance of loans with downpayment assistance from non-profit organizations. Since then, the IRS has published a ruling disallowing non-profit organizations from receiving contributions from home sellers to be used as cash downpayment gifts to the buyer. This ruling will reduce the volume of these high-claim loans in the future. It is IRS's expectation that organizations involved in such activities will be completely eliminated in two years. Whether IRS's ruling can be effectively enforced would play an important role in the overall credit quality of the new books of business over the next few years. Close scrutiny is necessary regarding this issue.

- Using borrower credit rating data in the actuarial models

  For the first time, this Review used a limited set of borrower credit scores (FICO scores) to estimate the claim probabilities. They have proven to have significant predictive power of loan performance. The scores, however, are not available for the majority of borrowers, and extrapolations had to be used for this Review.

- Interpretation of how high the capital ratio should be before introducing reduced premiums, distributive shares or other features

  Investigation into this issue should involve exploration of various actuarial metrics for assessing the strength of the capital ratio, particularly in terms of the viability of the Fund to withstand prolonged adverse economic conditions.

- The current Review depends on FHA's projection of the volume of future books of business

  A more comprehensive demand forecast model that incorporates the distribution of loans across loan types, LTV categories, and regions, in addition to overall volume estimates, could enhance the reliability of the capital ratio projection of future fiscal years.