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CREDIT REFORM

Key Credit Agencies Had Difficulty Making Reasonable Loan Program Cost Estimates





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The Honorable John R. Kasich
Chairman, Committee on the Budget
House of Representatives

The Honorable Steve Horn
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House of Representatives

Our report on the fiscal year 1997 consolidated financial statements of the federal government¹ raised major concerns about the ability of credit agencies' to reasonably estimate, for both financial statement and budgetary purposes, subsidy costs related to the reported \$216.6 billion in direct loans and \$712.4 billion in loan guarantees issued by the federal government.² Providing reasonable estimates based on reliable data is critical to effective program stewardship and accountability. Program managers and the Congress rely on this information to make funding and programmatic decisions involving hundreds of billions of dollars annually. For some types of credit programs, unreliable information can affect the availability and the delivery of basic program services to taxpayers because changes in cost estimates may alter the number and amount of loans available.

To gain an understanding of the key issues impeding reasonable estimates of subsidy costs of credit programs for the five key credit agencies, the Small Business Administration (SBA) and the Departments of Education, Housing and Urban Development (HUD), Veterans Affairs (VA), and Agriculture (USDA),³ we reviewed these agencies' abilities to reasonably estimate the cost of their loan programs, including whether they used

¹Financial Audit: 1997 Consolidated Financial Statements of the United States Government (GAO/AIMD-98-127, March 31, 1998).

²Fiscal year 1997 financial data was the most recent information available and, except where noted, is used throughout the report.

³These agencies have the largest domestic federal credit programs and accounted for 74 percent of the government's outstanding direct loans and 94 percent of its outstanding guaranteed loans outstanding as of September 30, 1997.

practices identified by the Credit Reform Task Force⁴ as being effective in making these estimates. We also reviewed the status of agencies' efforts to ensure that computer systems used to estimate the cost of credit programs are Year 2000 compliant.

Results in Brief

While federal credit agencies have been required to estimate the cost of their loan programs in accordance with the requirements of the Federal Credit Reform Act of 1990 (FCRA) and federal accounting standards since fiscal years 1992 and 1994, respectively, only two of the five major credit agencies we reviewed made reasonable loan program cost estimates in their fiscal year 1997 financial statements. In response to our fiscal year 1997 governmentwide consolidated financial statement report, the Office of Management and Budget (OMB) directed agencies that did not receive an unqualified opinion on their financial statements to develop action plans to address identified financial management weaknesses. Additionally, some agencies that received unqualified audit opinions are also acting to resolve issues with their estimates of loan program costs, based on recommendations made during financial statement audits.

The problems agencies faced in making credit subsidy estimates as required by FCRA and federal accounting standards stemmed largely from their lack of (1) reliable historical data upon which to base estimates of future loan performance, (2) adequate systems that have the capability to track the required information, (3) sound cash flow models, and/or (4) appropriate policies and procedures for ensuring the accuracy of data used to generate the estimates. Additionally, VA had fundamental problems in maintaining accountability over its loan portfolio. These issues, which affected the agencies in varying degrees, impeded them from making reasonable loan program cost estimates for fiscal year 1997 for financial statement and/or budgetary purposes.

The financial statement audits of all five of these agencies were instrumental in providing the basis for recommending changes to the agencies' loan cost estimation processes that could greatly improve the estimates. Progress towards addressing cost estimation issues also varies

⁴The Credit Reform Task Force, formerly known as the Subgroup on Credit Reform of the Governmentwide Audited Financial Statements Task Force (established to study accounting and auditing issues related to credit reform implementation in preparation for the first audit of the governmentwide consolidated financial statements and to provide guidance to agencies to resolve these issues), is now a task force of the Accounting and Auditing Policy Committee sponsored by the Federal Accounting Standards Advisory Board (FASAB). This task force developed a Technical Release, Preparing and Auditing Direct Loan and Loan Guarantee Subsidies Under the Credit Reform Act, which has been approved by FASAB and is expected to be issued by the Office of Management and Budget as authoritative guidance during fiscal year 1999.

by agency. For example, SBA has taken steps to address the identified weaknesses in its cost estimation process, while USDA has a number of remaining problems that need resolution. Until each agency fully addresses the identified weaknesses in its cost estimation process, the credibility of loan program cost information submitted by these agencies for both financial statement and budgetary purposes will continue to be questionable.

SBA was one of the two agencies able to make reasonable estimates of the cost of its loan programs in its fiscal year 1997 financial statements, primarily because the agency maintained reliable records of historical loan performance data. However, for the two programs we reviewed, SBA made significant errors in initially calculating its reestimates of loan program costs. These errors, which were identified by SBA's independent public accountant, were adjusted for in SBA's draft financial statements, thereby allowing for an unqualified audit opinion on those statements. However, the errors were not identified in time to be corrected in SBA's fiscal year 1999 budget submission to OMB nor in the President's budget submission to the Congress. SBA has recently adopted a number of cost estimation practices that should help ensure that such errors are detected and corrected promptly and that SBA's budgetary and financial estimates of loan program costs are reasonable.

The Department of Education was able to prepare reasonable credit program estimates for its fiscal year 1997 financial statements based on information obtained through a significant data gathering effort from its guaranty agencies.⁵ However, the audited estimates differed significantly from the estimates based on data from Education's own database, which raises questions about the validity of Education's database. Further, Education used its questionable internal data for its budget submission to OMB. Until the agency verifies that its internal database contains accurate data, Education will be required to expend an inordinate amount of time and resources gathering the necessary information to make reasonable loan program cost estimates. Education has efforts underway to address the challenges it faces in preparing reasonable loan cost estimates, including continuing efforts to assess the accuracy and completeness of its database.

HUD was unable to provide adequate supporting data for its fiscal year 1997 financial statement estimates of its loan program costs, which resulted in a

⁵These agencies serve as intermediaries between the government and the lender. They are responsible for reviewing student applications and approving loans, reviewing and paying claims to lenders when defaults occur, and collecting on defaulted loans.

qualified audit opinion⁶ from HUD's Inspector General (IG) on those financial statements.⁷ This lack of supporting data also raises questions about the integrity of loan program cost information submitted for budgetary purposes. During fiscal year 1998, HUD focused significant attention on gathering the necessary data to prepare reasonable estimates of loan program costs. These data are currently undergoing an audit which, once completed, will determine the reasonableness of HUD's revised loan program cost estimates. Additionally, HUD has developed an action plan to address identified financial management issues related to the loan cost estimation process. This plan, if fully implemented, should help HUD prepare reasonable estimates of loan program costs.

During fiscal year 1997, VA faced significant problems performing routine accounting for its loan programs including loss of accountability over certain loans transferred to an outside servicer. These problems also hindered VA's ability to make reasonable financial statement estimates of its credit program costs and resulted in a qualified audit opinion on VA's fiscal year 1997 financial statements. Since budgetary estimates ought to be based in part on accounting data, the reliability of loan program cost information submitted for budgetary purposes is questionable. In addition, we determined that VA initially did not calculate or record the cost of its guarantee obligations on loans it sold to investors. In an attempt to correct this and other errors in its fiscal year 1997 draft financial statements, VA, in consultation with OMB, estimated and recorded an additional \$376 million expense as part of an aggregate adjustment for future losses and the related liability for the loans sold between 1992 and 1997. VA has prepared an action plan that addresses some of its financial management problems. The plan focuses on resolving the fundamental accounting problems for the loan sales program and the basic data integrity issues related to the incomplete loan inventory data maintained by the servicer.

During fiscal year 1997, USDA was unable to make reasonable financial statement estimates of its loan programs' costs because it had not maintained the necessary historical data to reasonably estimate future loan performance and continued to use computer systems that were not appropriately configured to capture the data necessary to make such

⁶A qualified opinion on financial statements is issued when the auditor believes that a particular aspect of the statements may be misstated. The qualification may result from a nonpervasive departure from federal accounting standards or the inability of an auditor to obtain audit satisfaction on a component of the financial statements.

⁷FHA, a major component of HUD, received an unqualified opinion on its fiscal year 1997 financial statements prepared using private sector generally accepted accounting standards (GAAP). However, the reported amounts related to FHA's loan programs using federal accounting standards would be significantly different than those reported under GAAP.

estimates. These long-standing problems contributed to the auditor's inability to give an opinion on USDA's fiscal year 1997 consolidated financial statements. These negative audit findings also raise concerns over the integrity of USDA's loan program budgetary data. Although USDA has developed an action plan to address deficiencies in its loan estimation process, the plan does not include several critical components necessary for USDA to resolve these problems.

The five key credit agencies also face the challenge of addressing the Year 2000 problem related to systems used in the loan cost estimation process. According to agency officials, for the 10 loan programs we reviewed, all of the systems that provide key cash flow data have been identified as "mission-critical" and are either currently Year 2000 compliant or are scheduled to be compliant by March 31, 1999. However, in its Quarterly Report: Progress on Year 2000 Conversion, as of mid-November 1998, OMB (1) expressed concerns related to progress on Year 2000 conversion at Education and USDA, (2) noted that HUD and VA appear to be making satisfactory progress towards being Year 2000 compliant, and (3) pointed out that SBA was the first agency to report that all of its mission-critical systems were Year 2000 compliant. In previous reports and testimonies we have also raised issues over the status of Year 2000 conversion efforts at the five key credit agencies, except for SBA. Additionally, according to agency officials, they have all begun business continuity and contingency planning to help maintain core business processes in the event of any Year 2000-induced disruptions.

Background

The federal government uses direct loans and loan guarantees as tools to achieve numerous program objectives, such as assistance for housing, farming, education, small businesses, and foreign governments. At the end of fiscal year 1997, the Department of the Treasury reported that the federal government's gross direct loans outstanding totaled \$216.6 billion, and loan guarantees outstanding totaled \$712.4 billion.

Before enactment of the Federal Credit Reform Act of 1990, credit programs—like most other federal programs—were recorded in budgetary accounts on a cash basis. While this basis reflected cash flows, it distorted the timing of when costs would actually be recognized and, thus, distorted the comparability of credit program costs with other programs intended to achieve similar purposes, such as grants. For example, for direct loans, the budget generally showed budget authority and outlays for loans disbursed that exceeded repayments received from all past loans in that year.

Therefore, in the budget a direct loan in the first year of a program was equivalent to the cost of a grant. Cash-basis budgetary recording also suggested a bias in favor of loan guarantees over direct loans. Loan guarantees appeared to be free in the short-term because cash-basis recording did not recognize that some loan guarantees result in costs due to default of the underlying loans.

FCRA changed the budgetary treatment of credit programs beginning with fiscal year 1992 so that their costs could be compared more appropriately with each other and with the costs of other federal spending. FCRA requires that agencies have budget authority to cover the program's cost to the government in advance, before new direct loan obligations are incurred and new loan guarantee commitments are made. The act therefore requires agencies to estimate the cost of extending or guaranteeing credit, called the subsidy cost.⁸ This cost is the present value⁹ of disbursements—over the life of the loan—by the government (loan disbursements and other payments) minus estimated payments to the government (repayments of principal, payments of interest, other recoveries, and other payments). For loan guarantees, the subsidy cost is the present value of cash flows from estimated payments by the government (for defaults and delinquencies, interest rate subsidies, and other payments) minus estimated payments to the government (for loan origination and other fees, penalties, and recoveries).

FCRA assigned to OMB the responsibility to coordinate the cost estimates required by the act. OMB is authorized to delegate to lending agencies the authority to estimate costs, based on written guidelines issued by OMB. These guidelines are contained in sections 33.1 through 33.12 of OMB Circular No. A-11, and supporting exhibits.¹⁰

The Federal Accounting Standards Advisory Board (FASAB)¹¹ developed the accounting standard for credit programs, Statement of Federal Financial

⁸In accordance with the Federal Credit Reform Act of 1990, the subsidy cost of direct and guaranteed loans does not include administrative costs of the program.

⁹Present value is the value today of a stream of payments in the future discounted at a certain interest rate. For the period we reviewed, when calculating the present value of loan subsidy costs, agencies must use as the discount rate the average annual interest rate for marketable U.S. Treasury securities with similar maturities to the loan or guarantee.

¹⁰The act requires OMB to coordinate with the Congressional Budget Office in developing estimation guidelines.

¹¹FASAB was created by OMB, Treasury, and GAO to develop and recommend accounting principles for the federal government. These three agencies approved Statement of Federal Financial Accounting Standards (SFFAS) No. 2, Accounting for Direct Loans and Loan Guarantees, in July 1993.

Accounting Standards No. 2, Accounting for Direct Loans and Loan Guarantees (SFFAS No. 2), which became effective with fiscal year 1994. This standard, which generally mirrors FCRA, established guidance for estimating the cost of direct and guaranteed loan programs, as well as for recording direct loans and the liability for loan guarantees for financial reporting purposes. SFFAS No. 2 states that the actual and expected costs of federal credit programs should be fully recognized in both budgetary and financial reporting. To accomplish this, agencies first predict or estimate the future performance of direct and guaranteed loans when preparing their annual budgets. The data used for these budgetary estimates are generally reestimated after the fiscal year end to reflect any changes in actual loan performance since the budget was prepared, as well as any expected changes in assumptions and future loan performance. This reestimated data is then used to report the cost of the loans disbursed under the direct or guaranteed loan program as a “Program Cost” on the agencies’ Statement of Net Costs after loans are disbursed.

Agency management is responsible for accumulating sufficient, relevant, and reliable data on which to base the estimates. Further, SFFAS No. 2 states that agencies should use the historical experience of the loan programs when estimating future loan performance. To accomplish this, agencies use cash flow models based on various assumptions, often referred to as cash flow assumptions, such as the number and amount of loans that will default in a given year—known as the default assumption. Those assumptions that have the greatest impact on the credit subsidy vary by program and are often referred to as key cash flow assumptions.

Statement on Auditing Standards No. 57 states that auditors should evaluate the reasonableness of estimates in the context of the financial statements taken as a whole. As part of the annual financial statement audits, agency cash flow models and assumptions are assessed to determine if management has a reliable basis for its credit subsidy estimates.

In 1997, the Credit Reform Task Force of the Accounting and Auditing Policy Committee¹² was formed in order to address key issues surrounding the implementation of FCRA and the related federal accounting standard. This task force developed a Technical Release, Preparing and Auditing Direct Loan and Loan Guarantee Subsidies Under the Credit Reform Act, which has been approved by FASAB and is expected to be issued by OMB during fiscal year 1999. This Technical Release identifies specific practices

¹²See footnote 4.

that, if fully implemented by credit agencies, will enhance their ability to reasonably estimate loan program costs.¹³ These practices include the following:

- Accumulating sufficient, relevant, and reliable supporting data that provides a reliable basis for agencies' estimates of future loan performance. For example, to make reasonable projections of future loan defaults, recoveries, prepayments, or other key cash flows, agencies should use reliable records of historical experience and take into consideration current and forecasted economic conditions.
- Conducting periodic comparisons of estimated loan performance to actual cash flows in the accounting system. This comparison allows agencies to identify and research significant differences and determine whether assumptions related to expected future loan performance need to be revised.
- Calculating timely reestimates, based on the most recently available data, of the loan program's cost and including the reestimates¹⁴ in the current year's financial statements and budget submissions. By performing timely reestimates, agencies are including their best estimate of a loan program's cost in the agency's financial statements and budget submissions.
- Comparing cash flow models to legislatively mandated program requirements to ensure that current cash flow models reasonably represent the cash flows of the loan program based on the laws and regulations that govern them.
- Coordinating estimates of loan program cost among the budget, accounting, and program staff. These officials should work together to ensure that various practices, including those described above, are implemented and operating effectively and that all key assumptions have been coordinated and reviewed by the budget, accounting, and program offices.
- Performing sensitivity analyses to identify which cash flow assumptions, such as defaults, recoveries, or prepayments, have the greatest impact on the cost of the loan program. Knowledge of these key assumptions provides management with the ability to monitor the economic trends that most affect the loan program's performance. These analyses also allow agencies to more efficiently focus their efforts on providing support for

¹³The Technical Release contains other practices of a technical nature that we did not include in this discussion.

¹⁴OMB Circular A-11 requires budgetary reestimates greater than \$1 million or 5 percent of the pre-reestimate cost estimate to be included in the budget submission. Lesser reestimates may be reported cumulatively with future reestimates. However, for financial statement purposes, agencies are required to include reestimates that are significant to the financial statements.

the key assumptions, which need to be documented to pass the test of an independent audit.

- Ensuring that agency cash flow models are well organized, documented, and, to reduce the chance of errors, require minimal data entry. This documentation should include the rationale for using the specific model, the mechanics of the model, including formulas and other mathematical functions, and sources of supporting data.
- Establishing formal policies and procedures for calculating estimates of loan program cost, including a formal review process. Documented policies and procedures, as well as a formal review process, are important internal controls that are designed to help ensure continuity when there is employee turnover and to calculate reasonable, well-supported cost estimates.

During the summer of 1998, in response to our report on the fiscal year 1997 governmentwide consolidated financial statement audit, OMB directed agencies that did not receive an unqualified opinion on their financial statements to develop action plans to address identified financial management weaknesses. As a result, three of the five agencies in our review, HUD, VA, and USDA, prepared action plans to address, among other things, problems with preparing reasonable estimates of their loan program costs. Because SBA and Education received unqualified opinions on their fiscal year 1997 financial statements, these agencies were not required to, and did not, prepare formal action plans.

In a March 1998 report¹⁵ on credit reform estimation problems, we indicated that the five key credit agencies had problems estimating the subsidy cost of credit programs. During this prior review, we examined data for the same 10 programs (listed in the “Objectives, Scope, and Methodology” section) discussed in this report to identify trends and causes for the changes in subsidy estimates. The resulting report noted that the lack of timely reestimates, as well as the frequent absence of documentation and reliable information, limited the ability of agency management, OMB, and the Congress to exercise intended oversight. The report contained broad recommendations for improving oversight of credit reform implementation including ensuring that (1) estimates are prepared accurately and (2) documentation supporting subsidy estimates included in the budget and financial statements is prepared and retained. Appendix I provides additional background information on estimating the cost of credit programs.

¹⁵Credit Reform: Greater Effort Needed to Overcome Persistent Cost Estimation Problems (GAO/AIMD-98-14, March 30, 1998).

Objectives, Scope, and Methodology

Our objectives were to assess (1) the ability of agencies' to reasonably estimate the cost of their loan programs, including whether they used practices identified in the Credit Reform Task Force's Technical Release as being effective in making these estimates and (2) the status of agencies' efforts to ensure that computer systems used to estimate the cost of credit programs are Year 2000 compliant. We selected a sample of 10 programs—5 direct loan programs totaling \$52.1 billion and 5 guaranteed loan programs totaling \$558.1 billion—from the five agencies with the largest domestic federal credit programs: the Small Business Administration and the Departments of Education, Housing and Urban Development, Veterans Affairs, and Agriculture. We generally selected programs that had the most credit outstanding or highest loan levels at each agency. Specifically, these programs were the following:

- 7(a) General Business Loans Program and Disaster Loan Program, which totaled 72 percent of SBA's loan guarantees and 73 percent of its direct loans, respectively;
- Federal Family Education Loan Program and William D. Ford Direct Loan Program, which totaled 100 percent of Education's loan guarantees and 50 percent of its total loans receivable, respectively;
- Mutual Mortgage Insurance Fund and General and Special Risk Insurance Fund Section 223(f) Refinance, which totaled 81 percent of HUD's loan guarantees;
- Guaranty and Indemnity Fund and the Loan Guaranty Direct Loan Program, which totaled 100 percent of VA's post credit reform loan guarantees and 69 percent of its total loans receivable, respectively; and
- Farm Service Agency Farm Operating Loans Program and Rural Housing Service Single Family Housing Program, which totaled 20 percent¹⁶ of USDA's direct loans.

Generally, to accomplish these objectives, we evaluated the process the agencies used to estimate the cost of their loan programs during fiscal year 1997, including whether the agencies used practices outlined in the Credit Reform Task Force's Technical Release that enhanced their ability to reasonably estimate loan program costs. In addition, we determined whether agencies had a reliable basis for the underlying assumptions for their estimates of loan program performance by assessing the support for key cash flow assumptions. We used the financial statement audit work of

¹⁶At the end of fiscal year 1997, USDA reported that \$79.3 billion, nearly 78 percent of the direct loan portfolio, was either disbursed prior to the implementation of the Federal Credit Reform Act in fiscal year 1992 or consisted of price support loans that were excluded by Section 502(1) of the Federal Credit Reform Act. Thus, we focused on these two programs because they were the domestic loan programs subject to credit reform that had disbursed the largest volume of loans in less than 4 years.

the respective agency auditors as a starting point for our analyses. Further, we obtained information on the status of agencies' efforts to ensure that computer systems used to estimate the cost of credit programs are Year 2000 compliant.

Our work was conducted in Washington, D.C., and St. Louis, Missouri, from September 1997 to November 1998 in accordance with generally accepted government auditing standards. We requested written comments on a draft of this report from the following officials or their designees: the Administrator of Small Business and the Secretaries of Education, Housing and Urban Development, Veterans Affairs, and Agriculture. All of the entities provided written comments, which are discussed in the respective "Agency Comments and Our Evaluation" sections of this report and are reprinted in appendixes III through VII. Further details of our objectives, scope, and methodology are in appendix II.

Not All Key Credit Agencies Could Make Reasonable Estimates of Loan Program Costs

For the 10 credit programs at the five key credit agencies we reviewed, only SBA and Education were able to reasonably estimate the cost of their credit programs for financial reporting purposes and received unqualified opinions on their fiscal year 1997 financial statements. However, the data that Education used to prepare its budget estimates, which were different from the data used to prepare its financial statements, had not been validated. Further, SBA made errors in the reestimate it submitted for budget purposes. HUD, VA, and USDA were not able to prepare reasonable estimates, which contributed to their qualified opinions or disclaimers¹⁷ of opinion on their fiscal year 1997 financial statements. These problems also call into question the reliability of the loan program data these agencies submitted to the Congress for future budget decisions. HUD, VA, and USDA have prepared action plans to correct some of their loan cost estimation problems. In addition, during 1998, HUD focused considerable effort on making reasonable cost estimates of its loan programs. Further, while not required to prepare formal action plans, both SBA and Education have planned or acted to correct deficiencies in their loan estimation process.

¹⁷A qualified opinion on financial statements is issued when the auditor believes that a particular aspect of the statements may be misstated. The qualification may result from a nonpervasive departure from federal accounting standards or the inability of an auditor to obtain audit satisfaction on a component of the financial statements. A disclaimer may arise because of a severe limitation in the scope of the audit, perhaps due to the lack of documentation and/or uncertainties about the amount of an item, or the outcome of a matter that significantly affects financial position.

SBA Prepared Reasonable Cost Estimates but Had Weaknesses in Its Reestimate Process

SBA based its fiscal year 1997 estimates of loan program costs on reliable records of historical loan performance data and was therefore able to make a reasonable estimate of the cost of these programs on its fiscal year 1997 financial statements. However, for the two programs we reviewed, SBA initially made errors in the reestimates of its loan program's costs, which its independent public accountant uncovered, including using incorrect discount rates, which required large adjustments to the draft financial statements. As a result of making these adjustments, SBA received an unqualified opinion on its fiscal year 1997 financial statements. However, because the fiscal year 1997 budgetary reestimate was included with the fiscal year 1999 President's budget prior to the audit adjustments, the budgetary reestimate contained erroneous data.

Since the inception of credit reform in 1992, SBA has placed significant emphasis on gathering reliable key cash flow data and, with OMB's assistance, developed sophisticated cash flow models to estimate future loan performance and cost. Beginning in 1992, SBA devoted considerable resources to evaluating its existing financial management systems and determining what modifications would be necessary to allow it to reasonably estimate loan program costs under credit reform. Since these initial efforts, SBA has continued to further refine its estimates of loan program costs and the related underlying assumptions. For example, during 1997, SBA hired consultants to study and develop refined loss and recovery estimates for the Disaster Loan Program.

SBA followed a number of practices that enhanced its ability to make reasonable financial statement and budgetary estimates of loan program costs for the two programs we reviewed. For example, SBA developed an extensive database of historical cash flow information, which provided a reliable basis for its estimates of credit program costs. Further, SBA, with assistance from OMB, established sophisticated, well organized cash flow models that, when compared with actual historical data, reasonably estimated future loan performance. Because of this database and SBA's sophisticated cash flow model, SBA was able to calculate reasonable estimates of loan program costs without significant manual intervention or requests for data from outside entities. SBA also routinely compared estimated loan performance to actual costs recorded in the accounting system to assess the reasonableness of its estimates of future loan performance and costs. Finally, in preparing their estimates for the two programs we reviewed, individuals from SBA's program, budget, and accounting offices coordinated their work.

However, during the audit of SBA's fiscal year 1997 financial statements, the independent public accountants identified material internal control weaknesses¹⁸ related to estimating the cost of credit programs. Specifically, the independent public accountant reported that incorrect data, including discount rates, were used in the 1997 reestimate, and errors existed in some of the reestimated cash flow models. In aggregate, these errors resulted in SBA recording over \$221 million in adjustments to its financial statements, which enabled the independent public accountant to render an unqualified opinion. However, these adjustments were not identified until after SBA submitted its fiscal year 1999 budget to OMB and, as a result, this budget submission and the President's budget misstated the cost of these loan programs. Further, the independent public accountant reported that SBA lacked adequate internal controls over the estimation process. For example, SBA did not retain the cash flow models for one of the programs we reviewed for fiscal years 1992 through 1997. Although these models are normally a part of performing the reestimates, and should be retained as a matter of routine record-keeping, SBA was able to calculate a reasonable financial statement reestimate by using a more recent cash flow model.

Because SBA received an unqualified audit opinion on its fiscal year 1997 financial statements, OMB did not require SBA to prepare a formal action plan to address the weaknesses identified in the estimation process. However, in the audit report on the fiscal year 1997 financial statements, the independent public accountant made recommendations, with which we concur, which addressed the material internal control weaknesses described above including developing formal policies and procedures for estimating the cost of credit programs and implementing a formal supervisory review process to identify and correct potential errors. In response to these recommendations, SBA developed and implemented formal policies and procedures including a formal supervisory review process. In addition, SBA adopted other practices, such as performing sensitivity analyses and calculating its fiscal year 1998 reestimate earlier than the fiscal year 1997 reestimates, to allow sufficient time to include any necessary adjustments resulting from the audit in the data presented in the President's budget. These actions should help SBA ensure that future

¹⁸Internal controls provide the framework for the accomplishment of management objectives, accurate financial reporting, and compliance with laws and regulations. When estimating the cost of loans, effective internal controls serve as checks and balances to help ensure the reasonableness of the estimate. Material weaknesses in internal controls are significant deficiencies in the agency's internal controls, which could significantly affect the financial statements or a performance measure and not be detected promptly by the agency.

Agency Comments and Our Evaluation	errors are detected and corrected promptly and that budgetary and financial estimates of loan program costs are reasonable. SBA agreed with the findings in this report. (SBA's comments are reprinted in appendix III.)
Education's Financial Statement Estimates Were Reasonable, However Budget Estimates Were Questionable	The Department of Education was able to prepare reasonable credit program estimates for its fiscal year 1997 financial statements, based on information obtained through a significant data gathering effort from its guaranty agencies.¹⁹ However, the audited estimates differed materially from the credit subsidy estimates based on Education's own database, which raises questions about the validity of Education's database. Further, Education's credit program estimates for its budget submission for these two programs were based on the questionable data from its own database. Until the information in the existing database is determined to be reliable, Education will continue to expend considerable time and resources in order to make reasonable loan program cost estimates. While the IG concluded that Education's fiscal year 1997 financial statement estimates were reasonable, several internal control weaknesses were reported. For example, the IG reported that Education needed to establish the validity of its principal database, the National Student Loan Data System (NSLDS),²⁰ to provide a basis for preparing reliable loan estimates and to establish sufficient controls to detect material errors in its loan estimates. Data from NSLDS were used to prepare the fiscal year 1997 budgetary estimates because Education's staff believed that the data were reliable. However, the weaknesses found in Education's internal controls raise questions about the quality of this database. Based on Education's continuing validation efforts, it believed that estimates based on data from NSLDS would be similar to estimates based on data received from the guaranty agencies. Education therefore planned to use the guaranty agencies' data to validate the estimates that were based on NSLDS data. As part of this plan, Education prepared two estimates for

¹⁹These agencies serve as intermediaries between the government and the lender. They are responsible for reviewing student applications and approving loans, reviewing and paying claims to lenders when defaults occur, and collecting on defaulted loans.

²⁰NSLDS prescreens student financial aid program applications, reports on student status confirmation, and tracks borrowers. This system contains information regarding loans made, insured, or guaranteed for Education's direct and guaranteed loan programs. Its purposes are to (1) ensure that accurate and complete data on student loan indebtedness and institutional lending practices are available, (2) screen applications to identify prior loan defaults, (3) provide a database to research and identify trends and patterns, (4) support audits and program reviews, and (5) calculate default rates.

financial statement purposes—one based on data from NSLDS and the other based on data from the guaranty agencies. The IG audited the estimates based on the data provided by the guaranty agencies²¹ and concluded that these estimates differed materially from the estimates based on Education's own database. Further, the IG reported that "Education's own procedures for preparing its loan estimates were not sufficiently rigorous to detect this material misstatement" and that "Education's ability to continue to prepare auditable loan estimates for its financial statements depends on establishing a reliable store of up-to-date historical loan data."

The IG audited the guaranty agency-based estimates and found them to be reasonable. However, obtaining data from the guaranty agencies was a time-consuming way for Education to develop its estimates of loan program costs and should be viewed as a short-term solution only. It is not feasible for Education to carry out this process year after year instead of relying on the principal system that was designed to provide this information.

In addition to these data problems, the auditors identified some instances where Education's estimation practices could be improved. For example, Education did not have documented policies and procedures for calculating the cost of credit programs, including a formal review process, to routinely identify and correct potential errors. These important internal controls could help ensure the reasonableness of Education's complex estimates in the future. While Education did some limited sensitivity analyses, it did not document the analyses. Such documented analyses would have allowed its auditors to focus their audit procedures on the key cash flow assumptions. For fiscal year 1997, the IG audited more than 20 cash flow assumptions to validate the assumptions used by the model to estimate the cost of the loan programs. In the future, conducting a complete sensitivity analyses and documenting the results could save significant time and effort by helping focus management and the auditors' attention on the reasonableness of the assumptions that have the greatest impact on the program's cost.

Using guaranty agency data, Education was able to calculate reasonable financial statement estimates of credit program costs, partly due to the sophistication of its credit subsidy model. Education developed its own method for estimating and reestimating credit program costs, called the Budget Loan Model (BLM) System. This model uses a series of assumptions

²¹The data received from the guaranty agencies, which was used to calculate the financial statement estimates, was subjected to specific audit procedures by the guaranty agencies' auditors and was determined to be materially correct by the auditors.

to estimate cash flows over the life of the loans. BLM is used in concert with the OMB credit subsidy model because Education believes it captures the unique requirements of its program. During the fiscal year 1997 audit, BLM was reviewed and the auditors determined that BLM included and modeled all key elements of Education's various loan program requirements, such as loan term and repayment grace periods, and used historically valid data obtained from the guaranty agencies.

In addition to developing its sophisticated cash flow model, Education followed other effective practices for cost estimation, such as documenting its cash flow model, by developing a Technical Manual and User's Guide. Also, for financial statement purposes, agency staff compared estimates of future loan performance, based on the data obtained from the guaranty agencies, to actual costs recorded in the accounting system and determined that the financial statement estimates reasonably predicted future loan performance. Further, calculating the estimates of loan program costs at Education was a coordinated effort between the accounting, budget, and program staff. For example, representatives from these three offices met on a regular basis and jointly developed the cash flow assumptions used in the financial statement estimates. In addition, Education compared the cash flow models to program requirements and determined that its models accurately captured all material aspects of the credit programs. Finally, Education also calculated timely reestimates for both budgetary and financial statement purposes.²² However, as discussed previously, the NSLDS data used for the budget reestimates were questionable.

Since Education received an unqualified audit opinion on its fiscal year 1997 financial statements, the agency was not required by OMB to prepare a formal action plan to address any financial management issues. However, according to Education officials, Education has efforts underway to address the challenges it faces in preparing reasonable estimates of its loan program costs. For example, Education is continuing its efforts to review and correct inaccurate or incomplete data in NSLDS, including providing detailed technical instructions to data originators and providers (schools, lenders, and guaranty agencies). These efforts should help Education address its major loan cost estimation challenges. However, until these efforts are successfully completed and Education can rely on

²²Education did not issue its fiscal year 1997 audited financial statements until June 15, 1998, 3 months after the March 1, 1998, deadline for submission to OMB, due to the difficulties with the conversion to a new general ledger system, delays in completing reconciliations with Treasury, and preparation of loan subsidy estimates.

the data in NSLDS, it will be forced to repeatedly undergo an onerous process in order to make reasonable estimates of loan program costs.

In its June 1998 audit report on Education's fiscal year 1997 financial statements, the IG made several recommendations, which we concur with, related to improving the agency's loan cost estimation process. Specifically, the IG recommended that Education (1) maintain documentation of the source of the data used in developing assumptions for its cash flow models and the models themselves, (2) validate the data used in the models, (3) update data annually to reflect the current activity, (4) perform and document sensitivity analyses to identify factors that significantly impact the loan estimates or may vary in the future as well as factors that rely on assumptions not based on current data, (5) establish clearly defined roles and responsibilities for staff and groups responsible for developing estimates of Education's loan programs, (6) develop formalized policies and procedures for estimating the cost of credit programs, and (7) perform quality assurance reviews of loan estimates and document the results of these reviews. Education agreed with these recommendations and as discussed above has acted or plans to act to address these recommendations.

Agency Comments and Our Evaluation

Education stated that it does not believe our report provides a basis to conclude that data from NSLDS are of questionable validity. They further stated that NSLDS data were "highly comparable" to data received from the guaranty agencies and that adjustments made to the loan cost estimates as a result of the fiscal year 1997 financial statement audit process were also reflected in the agency's budget forecasts. Education therefore concluded that the budget estimates were "highly reliable."

We disagree. Our conclusion that the data from NSLDS are of questionable validity is based on our review of the IG's fiscal year 1997 financial statement audit report and supporting work papers. We also held numerous discussions with IG staff responsible for the audit. Based on this work, we determined that (1) the data in NSLDS have never been validated by the agency, despite the fact that the IG, beginning with the fiscal year 1995 audit, recommended this be done in order to provide a basis for preparing reasonable loan cost estimates, (2) material differences were noted by IG staff between the data in NSLDS and that provided by the guaranty agencies, and (3) the adjustments made to the loan cost estimates as a result of the fiscal year 1997 audit were made during the summer of 1998—several months after the fiscal year 1997 budget estimates were submitted to OMB as part of the President's fiscal year 1999

budget—and, therefore, these adjustments could not have been reflected in those budget estimates.

Further, we reviewed the December 1998 letter the IG submitted to the House Majority Leader and the Chairman, House Committee on Government Reform and Oversight, in response to their request that the IG update its assessment of the most significant challenges facing the Department of Education. The IG's letter identified improving the data integrity of Education's information management systems, including NSLDS, as one of Education's most significant management challenges. The report stated that the "Student Financial Assistance loan programs contain inaccurate and incomplete data." Specifically, the IG reported that the September 1998 audit of NSLDS found that about 3.7 million loan records totaling \$10.7 billion had not been updated with lender-provided loan status and principal and interest balance data.

Until Education corrects its inaccurate loan data and successfully completes a validation of NSLDS, any loan cost estimates prepared based on NSLDS will continue to be questionable. (Education's comments are reprinted in appendix IV.)

HUD Did Not Prepare Reasonable Fiscal Year 1997 Estimates, but Recent Improvements Have Been Made

At the end of fiscal year 1997, HUD was unable to provide adequate supporting data for its financial statement credit subsidy estimates. This lack of supporting data also calls into question the quality of HUD's budget submission related to its credit subsidy estimates. Since then, HUD, with the assistance of independent contractors, has focused significant effort on this area and has made considerable progress towards developing the supporting data necessary to reasonably estimate loan program costs, including those for the two programs we reviewed. These revised data are currently undergoing an audit, which, once completed, will help determine the reliability of the data and, thus, the reasonableness of HUD's loan cost estimates.

Most of HUD's loan guarantees are made by the Federal Housing Administration (FHA) which, as a government corporation, follows private sector generally accepted accounting principles (GAAP). FHA received an unqualified audit opinion on its fiscal year 1997 financial statements prepared in accordance with GAAP. However, in order to consolidate FHA's financial results into HUD, credit program cost information must be converted to federal accounting standards. HUD has had difficulty making this conversion due to the differences in the two accounting approaches

for credit programs. Under SFFAS No. 2, when estimating the liability and related expense for future defaults on guaranteed loans, FHA must estimate, for the life of the loans, all cash disbursements related to the loan guarantee and the associated collateral (for example, payment of default claims and costs to dispose of foreclosed property) as well as all cash receipts (for example, loan guarantee premiums and proceeds from the sale of foreclosed properties). GAAP considers most of the same receipts and disbursements but does not include loan guarantee premiums (a significant cash receipt for FHA) when calculating the same liability and related expense. Under GAAP, the loan guarantee premiums are generally reported as revenues. Further, calculating the present value of receipts and disbursements is not required under GAAP. Because of the different methods of calculating this liability and related expense, the GAAP-based amount would be significantly different from what would be calculated under SFFAS No. 2.

For fiscal year 1997, FHA was unable to prepare financial statements that complied with the requirements of SFFAS No. 2 in time to be audited and included in HUD's consolidated financial statements. As a result, the auditors issued a qualified opinion on HUD's fiscal year 1997 financial statements. However, an independent public accounting firm is currently auditing FHA's fiscal year 1997 balance sheet prepared in accordance with SFFAS No. 2 as part of its audit of the opening balances for the fiscal year 1998 financial statement audit.

While HUD was not recording the cost of its loan guarantee programs on its financial statements in accordance with the requirements of SFFAS No. 2, it was estimating the future cash flows of its loan guarantee programs for budget purposes. In the spring of 1998, we evaluated the cash flow models used to develop the fiscal year 1997 budget for the two programs we reviewed and identified numerous problems, such as formula errors and inconsistent calculations of cash flow assumptions. We also determined that these cash flow models were not documented and the Mutual Mortgage Insurance (MMI) Fund model required extensive manual data entry, which increased the likelihood of errors. Additionally, HUD was unable to provide supporting data for many of the cash flow assumptions in the models. These problems with the cash flow models and the supporting data raise concerns over the reliability of HUD's fiscal year 1997 budget submission for its credit subsidy estimates.

In the summer of 1998, HUD, with the assistance of independent contractors, focused significant effort on correcting the errors in these

models. These contractors assisted in gathering and developing sufficient, relevant, and readily available supporting data as a basis for the estimates of loan program cost estimates; performed extensive detailed analyses of these cash flow models; identified additional errors; and revised the models. The contractors also helped HUD implement other effective cost estimation practices. For example, the contractors compared cash flow models to program requirements and determined that these revised models accurately captured all significant aspects of the program, such as loan origination fees and rebates of premiums when loans are repaid early. In addition, the contractors assisted HUD in documenting these cash flow models, including sources of data and the mechanics of the model.

HUD, with the assistance of its contractors, also followed other effective cost estimation practices. For example, HUD recently performed sensitivity analyses for its credit programs, including the two we reviewed, to identify key cash flow assumptions. And, by working together, accounting, budget, and program staff focused their efforts on gathering and documenting the basis for the assumptions that had the greatest impact on HUD's credit subsidy estimates. HUD determined that an independent actuarial review provided the basis for three of the six key cash flow assumptions for the MMI model—the primary single family guaranteed loan program. For the remaining key cash flow assumptions for this program, HUD determined and documented that the basis for estimating future loan performance was historical experience from the accounting system.

While HUD has generally improved its estimation process for the two programs we reviewed, other improvements could be made. For example, comparing its estimates of future loan performance to actual cash flows recorded in the accounting system would enable HUD to determine whether these estimates reasonably predicted future loan performance. In making this comparison, we found that the average claim amount²³ used in the 1997 budget submission was consistent with historical experience for the MMI Fund. However, when the contractors were updating HUD's fiscal year 1997 cash flow models for financial reporting purposes, they misinterpreted a report and used it to calculate an estimated average claim amount for the MMI Fund that was significantly less than the actual amount recorded in the accounting system.

When we informed HUD of the error in the revised cash flow model, HUD changed the average claim amount to be consistent with actual costs

²³The average claim amount is the average amount paid to a lender when borrowers default on their insured mortgage and is also a key cash flow assumption for the Mutual Mortgage Insurance Fund program.

recorded in the accounting system. As a result, the estimated program cost recorded in the draft financial statements increased \$1.3 billion. If HUD had compared the estimated future loan performance used in the models to actual costs recorded in the accounting system, it would have detected this error in the average claim amount.

Also, for the two programs we reviewed, HUD did not prepare timely credit subsidy reestimates for budgetary and financial statement purposes. HUD obtained permission from OMB to routinely prepare budget reestimates in the summer following the reporting year. However, SFFAS No. 2 requires annual reestimates each year as of the date of the financial statements if the reestimate would significantly affect the amounts presented.

According to the Director of HUD's Housing Budget Office, actual data from the accounting system were not available in time to prepare reestimates in the fall—the same time that the staff were formulating the annual budget. HUD management has refined its reestimate approach which should have allowed for timely reestimates to be included in the current year's budget and financial statements.²⁴

Because HUD received a qualified opinion on its fiscal year 1997 financial statements, it was required by OMB to prepare an action plan to address identified financial management issues related to the loan program cost estimation process. This plan included accumulating supporting data for estimating the cost of its loan programs and reviewing its cash flow models to identify additional improvements that could reduce the chance of error. Further, the plan included routinely reestimating the cost of its loan programs timely and including the reestimates in both the current budget cycle and the current year's financial statements. Additionally, the plan included establishing formal policies and procedures that include a formal supervisory review process. The plan also provides for performing comparisons of estimated to actual loan performance. This plan, if fully implemented, should help HUD prepare reasonable estimates of loan program costs.

Recommendations

In its audit report on the fiscal year 1997 financial statements, the IG included a recommendation, with which we concur, that HUD develop and implement a plan to prepare the FHA data needed to meet SFFAS No. 2 requirements. As previously discussed, HUD has taken steps to address most of the problems related to reasonably estimating the cost of its loan programs. To help ensure that HUD is able to reasonably estimate the cost

²⁴However, HUD did not complete all components of its credit subsidy reestimates in time to be fully included as part of the fiscal year 2000 President's Budget.

of its loan programs, we recommend that the Secretary of Housing and Urban Development or his designee take the following actions:

- Complete efforts to work with independent contractors to accumulate sufficient, relevant, and reliable data to estimate the cost of credit programs.
- Implement plans to compare estimated cash flows to actual cash flow experience to validate the quality of the estimates as part of the annual reestimation process.
- Implement its revised reestimate approach that will result in timely credit subsidy reestimates for both financial statements and budget submissions.
- Implement existing plans to develop written policies and procedures including a formal supervisory review process for estimating the cost of credit programs.

Agency Comments and Our Evaluation

HUD did not take exception to the findings discussed in this report and agreed with and stated it plans to implement our recommendations. (HUD's comments are reprinted in appendix V.)

Major Deficiencies in Basic Loan Accounting System Precluded VA From Making Reasonable Estimates of Loan Program Costs

During fiscal year 1997, VA had serious problems²⁵ performing basic accounting for its loan programs and, therefore, did not have a reliable basis for the loan program cost estimates included in its financial statements. These problems contributed to the qualified audit opinion on VA's fiscal year 1997 financial statements. They also raise doubts about the reliability of loan program cost information submitted to OMB for budgetary purposes. Further, we found that VA did not record its guarantee obligations on the loans it sold. These weaknesses not only affect VA's ability to make reasonable cost estimates, but also call into question its ability to effectively manage and monitor its vendee loan program.

During fiscal year 1997, VA transferred the management of its direct loan portfolio to an outside servicer.²⁶ VA hoped that the transfer would reduce the number of staff resources needed and resolve existing internal control weaknesses and obsolescence issues related to its computer system. However, the data transferred to the servicer, which up to that point had been maintained by more than 40 VA regional offices, were incomplete and

²⁵We currently have additional work underway that specifically focuses on VA's serious basic accounting problems for its loan programs and that will include recommendations to address those problems.

²⁶Generally, a servicer manages the loan portfolio by accounting for the individual loans, collecting loan payments, maintaining escrow accounts, and foreclosing on delinquent borrowers.

inconsistent and immediately created loan servicing problems. Further, VA closed down its own loan servicing system without putting in place procedures designed to ensure that it maintained accountability over the loan portfolio. These procedures should have included maintaining an inventory of the loans in the portfolio and a loan origination database to be used in conjunction with the servicer's system. It also included other procedures for monitoring the amount and timing of cash due from borrowers.

As a result, VA management did not know the number or amount of direct loans outstanding at year-end, which VA estimated to be at least \$2.1 billion, or whether the amount of cash received from the servicer during the year was correct. Further, because the servicer did not have an accurate inventory, the servicer was, according to VA, unable to allocate over \$3 million in payments received after the transfer and, therefore, did not have correct payment histories for the affected loans. Without this basic information, VA was unable to reliably track the performance of its existing loans or reasonably estimate the future performance of its loans or the cost of its credit programs.

VA's loan accounting problems were further exacerbated by its improper treatment of loans sold to investors with a guarantee of prompt payment of future principal and interest. During fiscal year 1997, VA sold about \$1 billion in loans and, since 1992, has sold approximately \$9 billion in loans. Because VA guaranteed future principal and interest payments on the sold loans, it is responsible for future losses resulting from such occurrences as delinquencies and defaults of the underlying loans. According to SFFAS No. 2, future losses should have been estimated and a subsidy expense and related liability should have been established for future defaults or delinquent payments when the loans were sold.

Prior to fiscal year 1997, VA did not record the subsidy expense or the liability for potential future defaults on the loans it sold. Once we identified this error, VA, in consultation with OMB, estimated an additional expense as part of an aggregate adjustment for future losses and related liability for the loan sales not recorded between 1992 and 1997.²⁷ Because the adjustment was aggregated in the financial statements with other adjustments related to direct loans, we were unable to determine what portion of this \$376 million estimate was related directly to the loan sales

²⁷This expense was estimated as part of the direct loan program. However, OMB Circular A-11 requires that the related subsidy cost for loans sold with a guarantee be included as part of the loan guarantee program. In the future, VA plans to include the subsidy cost for the loans sold in the appropriate program.

activity, therefore, we did not attempt to determine the reasonableness of the adjustment. However, because of the lack of critical financial data, VA's ability to reasonably estimate the cost of its guarantee obligations related to loans sold is severely hampered. In order to further refine this estimate, VA recently hired an outside contractor to reconstruct the historical data on prior loan sales and develop a model to estimate the cost of loans sold with a guarantee. In addition, the contractor plans to assess VA's current cash flow models for direct and guaranteed loan programs to determine whether the assumptions are appropriate.

The problems VA had in accounting for its loans also hindered the agency's ability to implement effective cost estimation practices. For example, because VA lacked complete data about the inventory of loans in its portfolio, it did not have a reasonable basis for estimates of future loan performance and could not compare estimated loan performance to actual costs recorded in the accounting system.

VA did not use certain other estimation practices that would have improved its cost estimation process. For example, VA did not perform sensitivity analyses, but instead it relied on program managers' opinions in order to identify those assumptions that had the greatest impact on the programs' cost. As part of our assignment, we performed sensitivity analyses and verified that program managers' opinions correctly identified the key cash flow assumptions. However, for new programs and changes in current program design or delivery, sensitivity analyses would help ensure that key cash flow assumptions are appropriately identified. Also, VA did not have either written policies and procedures for estimating loan program costs or a formal review process that included representatives from the program, budget, and accounting offices. While VA did implement a number of effective cost estimation practices—including calculating timely reestimates, comparing cash flow models to program requirements, and having organized, documented cash flow models—the combined impact of VA's serious basic accounting weaknesses hindered its ability to make reasonable cost estimates.

As required by OMB, VA has prepared an action plan to address its financial management problems. The action plan focuses on resolving the fundamental problems in accounting for the loan sales program and the basic data integrity issues related to the incomplete inventory of loans currently maintained by the servicer. Until these basic accounting deficiencies are resolved, VA will continue to have difficulty making reasonable estimates of its loan program costs. Additionally, once VA's

basic accounting problems are resolved, management can turn its attention to implementing practices that will further improve its ability to make reasonable loan program cost estimates.

Recommendations

In its audit report on the fiscal year 1997 financial statements, the IG included a recommendation, with which we concur, that VA complete actions underway to ensure that all direct loan records are complete and accurate. Once VA's basic accounting issues are resolved, in order to correct the deficiencies that we identified in VA's direct and guaranteed loan program cost estimation processes, we recommend that the Secretary of Veterans Affairs or his designee implement the following cost estimation practices:

- Compare estimated cash flows to actual cash flow experience to validate the quality of the estimates as part of the annual reestimation process.
- Develop and implement written policies and procedures that include a formal supervisory review process and a coordinated approach between program, budget, and accounting staff for estimating the cost of credit programs.
- Use sensitivity analysis as a tool to identify key cash flow assumptions.
- Continue efforts, with the assistance of contractors, to create and use a model and develop the necessary data to calculate the liability for the guarantee on sold loans and record the related liability in the financial statements.

Agency Comments and Our Evaluation

In commenting on our draft report, VA concurred with our recommendations and agreed to implement them as part of its current efforts to correct direct loan records. However, VA did not agree with how we characterized the magnitude of the problems it encountered when the agency outsourced its loan portfolio. Generally, VA asserted that the problems discussed in this report were limited to a small portion of its overall credit programs and should not be considered material.

We disagree. The problems with VA's loans receivable and the liability for loan guarantees were so pervasive that the IG qualified its audit opinion on VA's fiscal year 1997 financial statements. As stated in its report, the IG was unable to attest to the accuracy of the loans receivable balance "because of incomplete records and the poor quality of the direct loan portfolio records." The IG further reported that VA's reported \$2.1 billion net credit program receivables balance was inaccurate because VA's accounting procedures were not being consistently followed and/or internal controls

were not operating effectively. The IG's report also stated that because of VA's "inadequate records, there were

- numerous errors in direct loan and associated escrow account balances and payment of taxes and insurance,
- significant delays in establishing new loans in the accounting records and processing borrowers' loan payments, and
- inconclusive general ledger account balances."

Specifically, with regard to the materiality of the transferred loans, these loans were \$1.2 billion, or 57 percent of the reported \$2.1 billion of net credit program receivables. Further, we found that VA sold \$9 billion of direct loans between 1992 and 1997 without initially recording the cost of its guarantee obligations. We consider each of these amounts to be significant. (VA's comments are reprinted in appendix VI.)

USDA Lacks Adequate Systems and Historical Data to Reasonably Estimate the Cost of Its Credit Programs

For fiscal year 1997, USDA was unable to make reasonable cost estimates for its loan programs because it did not maintain the historical data needed to predict future loan performance and used computer systems that were not appropriately configured to capture the data necessary to make such estimates. These long-standing problems contributed to the auditor's inability to give an opinion on USDA's fiscal year 1997 consolidated financial statements and raised questions about the quality of the budget data related to USDA's loan programs.

For the two programs we reviewed, USDA performed sensitivity analyses and identified which assumptions had the greatest impact on the credit subsidy. However, because it lacked adequate historical data, USDA based its prediction of key assumptions, such as the amount and timing of defaults and prepayments, primarily on the opinion of program managers. These managers estimated future loan performance based on their programmatic knowledge and experience without the assistance of extensive historical loan performance data and sophisticated computer modeling. Program management opinion may be an acceptable source of support for estimates when a new, unique program is established or when significant changes have been made to existing programs. However, program management opinion should be used only as an interim method

and does not provide a reliable basis for established programs.²⁸ Additionally, when program manager opinion is used, it should subsequently be compared to actual cash flow data from the accounting system to corroborate the reasonableness of management's judgment.

The lack of historical data for the two programs we reviewed was largely the result of system inadequacies. For example, prior to the implementation of FCRA, USDA's systems did not track certain key cash flow data. In addition, although USDA's current systems were capable of capturing some key cash flow data at the detail level, these systems could not summarize the data so that they were readily usable for calculating credit subsidy estimates. For example, USDA's current systems were incapable of accumulating summary level prepayment information because the systems could not distinguish between borrowers that were completely paying off loans and borrowers that were paying an extra amount each month. USDA's accounting system also did not contain the loan origination date for loans that were modified when borrowers experienced financial hardship and were unable to meet scheduled payments. As a result, the number and amount of delinquent loans in the accounting system could not be broken out by loan origination year, and USDA was unable to track individual loans through their entire history without extensive manual intervention.

USDA also lacked adequate historical data to estimate the amount of interest subsidy borrowers would receive in the future. The Single Family Housing Loan Program makes low interest rate loans to low income families who lack adequate housing and cannot obtain credit from other sources. For this program, the amount of interest that USDA subsidizes is based on borrowers' income. As the borrowers' income increases or decreases, USDA pays more or less interest subsidy on the loans. Ultimately, when the borrowers are capable of paying market interest rates for a housing loan, they "graduate" from the program because they no longer qualify for the program. However, USDA did not maintain adequate records of the number of borrowers who moved to higher income levels and when borrowers were eligible to graduate from the program.

²⁸Statement on Auditing Standards No. 57, Auditing Accounting Estimates, states that agency management is responsible for "accumulating relevant, sufficient, and reliable data on which to base the estimate." USDA lacked corroborating evidence demonstrating that agency staff judgment reasonably predicted actual loan performance for an extended period, and the USDA IG has concluded that staff judgment alone is not sufficient support for these estimates. We concur with the IG's conclusion.

Another factor affecting the reasonableness of USDA's estimates of loan program costs is the timing of reestimates that should be made to incorporate actual loan performance and other new information. In order to reasonably estimate and report the cost of loan programs, USDA must reestimate its credit subsidies on time and include these reestimates in the current year's financial statements and budget submission. However, USDA management told us that the agency lacked sufficient staff to make prompt reestimates for the programs we reviewed because these estimates needed to be calculated in the fall at the same time the budget was prepared. USDA received OMB's permission to calculate budgetary reestimates in the summer following the financial statement reporting year. However, this authorization to delay budgetary reestimates did not allow USDA to delay the financial statement reestimates. Further, USDA did not calculate the fiscal year 1997 reestimate for the Single Family Direct Loan Program until the fall of 1998—after the date agreed upon with OMB. As a result, the agency did not update its fiscal year 1997 estimate of loan program costs until nearly 3 years after the original estimate was prepared in 1995.²⁹

Until USDA calculates timely reestimates and includes them in its financial statements or clearly demonstrates that the reestimates would not be material to the financial statements, the amount of loans, liability for loan guarantees, and cost of the credit programs may be materially misstated on the financial statements. Delaying the reestimates also affects the quality of loan performance and cost data that are provided to the Congress for budgetary considerations.

Also, for the two programs we reviewed, USDA did not use other practices that would enhance its ability to reasonably estimate the cost of loan programs. For example, USDA did not routinely compare estimated loan performance to actual costs recorded in the accounting system to assess how closely the estimate compared with subsequent actual costs. It also did not routinely compare cash flow models to program requirements. These comparisons would have enabled USDA to identify and research significant differences and determine whether assumptions related to expected future loan performance needed to be revised. In addition, during fiscal year 1997, USDA did not have formal policies and procedures for calculating estimates of loan program costs or for a formal review process that included representatives from the program, budget, and

²⁹USDA management told us that beginning with fiscal year 1998, USDA planned to revise its reestimate process to calculate timely reestimates and include them in its fiscal year 1998 financial statements and budget cycle. However, implementation of this plan was delayed by OMB because additional testing of this revised process was needed.

accounting offices to help ensure continuity and accuracy during this complicated estimation process.

USDA has developed an action plan to address deficiencies in estimating the cost of its loan programs. This plan includes aggressive time frames and directs budget and accounting staff to prepare reasonable and timely estimates of loan program costs and to assemble the most accurate and reliable data available for each credit program. The plan also includes implementation of a number of practices that will improve USDA's estimation process, including revising cash flow models and comparing estimated loan performance to actual costs recorded in the accounting system. Additionally, the plan calls for a task force comprised of representatives from budget, program, accounting, and the IG offices to ensure that preparing the loan program cost estimates is a coordinated effort. Further, the plan calls for, and USDA is developing, formal policies and procedures for calculating estimates of loan program costs, including a formal review process by representatives from the program, budget, and accounting offices. Finally, the plan includes documenting the basis for the assumptions used to estimate program costs and identifying additional sources of data that may be used to reasonably estimate future loan performance.

The USDA IG told us that outside contractors may be needed to successfully implement the agency's action plan. Other agencies have successfully used outside contractors to assist with gathering and developing a reliable basis for their estimates of loan program costs and improving their cash flow models.

While implementation of the current plan will improve USDA's ability to prepare reasonable estimates of loan program costs, the plan does not currently address how USDA will implement the necessary computer system enhancements to address such problems as providing complete and accurate prepayment and delinquent loan information. Until these computer system enhancements are made, USDA will continue to have great difficulty making reasonable estimates of loan program costs based on reliable historical data. Further, until written policies and procedures that include a formal supervisory review process are developed and fully implemented, USDA will lack important controls to help ensure that errors are detected and corrected promptly.

Recommendations

In its May 1998 audit report, the USDA IG recommended, and we concur, that the agency develop sufficient, relevant, and reliable data to support its estimates of loan program costs. USDA has recognized the need to develop and better document its basis for the credit subsidy estimates and, as described above, has developed an action plan to address this problem. We also recommend that the Secretary of Agriculture or his designee take the following actions:

- Implement the action plan to address deficiencies in estimating the cost of loan programs in a timely manner, including
 - comparing estimated cash flows to actual cash flow experience to validate the quality of the estimates as part of the annual reestimation process,
 - reestimating loan program costs timely and including them in the current year's financial statements and budget submissions, and
 - developing and implementing written policies and procedures that include a formal supervisory review process and a coordinated approach between program, budget, and accounting staff for estimating the cost of credit programs.
- Ensure that the key cash flow assumptions in existing cash flow models are documented, including comparisons to program requirements.
- Ensure that once all mission-critical systems are Year 2000 compliant, computer systems are updated to capture the data necessary to reasonably estimate loan program costs.
- Consider hiring outside contractors to assist in gathering sufficient, relevant, and reliable data as a basis for credit program estimates.

Agency Comments and Our Evaluation

We received comments from both the Rural Development (RD) and Farm Service Agency (FSA) components of USDA because these two components operate the programs included in our review. In general, RD and FSA did not take exception to either the findings or most of the recommendations presented in this report. However, FSA stated that it would not be in its best interest to use outside contractors to assist in gathering sufficient, relevant, and reliable data as a basis for credit program estimates as we recommended. According to FSA, it has had success working with the National Agricultural Statistical Service (NASS) and believes that NASS can accomplish the same tasks we recommended, potentially at significantly lower costs. We agree that NASS has assisted FSA in gathering cash flow data. However, based on the amount of progress that other agencies have experienced in a short period of time with the assistance of independent contractors, we believe that FSA may also benefit from this type of contractor support and should explore this option as well.

Other comments received from RD and FSA focused primarily on the levels of historical data needed to make reasonable credit subsidy estimates and the steps these components have taken to address some of the challenges they face when making these estimates. RD and FSA also provided clarification on various points in our report, which we have incorporated as appropriate. (USDA's comments are reprinted in appendix VII.)

Year 2000 Computing Issues Could Affect the Ability of Agencies to Estimate Loan Program Costs

Another factor that could significantly affect the five key credit agencies' ability to make reasonable credit subsidy estimates in the future is the Year 2000 problem. The Year 2000 problem is rooted in the way dates are recorded and computed in many computer systems. For the past several decades, systems have typically used two digits to represent the year—such as “98” for 1998—to save electronic data storage space and reduce operating costs. With this two-digit format, however, the Year 2000 is indistinguishable from 1900, 2001 from 1901, and so on. As a result of this ambiguity, system or application programs that use dates to perform calculations may generate incorrect results when working with years after 1999. As an example of the potential impact, a veteran born in 1925 and therefore turning 75 in 2000 could be incorrectly computed as being negative 25 years old (if “now” is 1900)—not even born yet—and hence ineligible for benefits that the veteran had been receiving, such as a mortgage guarantee.

Addressing the Year 2000 problem is a major challenge for the five key credit agencies, all of which rely on computers to process and update records. Unless the systems that compile loan program information are Year 2000 compliant, the five key credit agencies may face serious problems at the turn of the century. Systems used to track loans could (1) produce erroneous information on loan status, such as indicating that an unpaid loan had been satisfied or (2) incorrectly calculate interest and amortization schedules. Loan origination, default, repayment schedule, prepayment, and premium receipts are all linked to dates. To assist in the credit subsidy estimation process, this date-related information must be retained for extended periods and used to project future cash flows for the credit agencies' loan programs. Therefore, computer systems that support the five key credit agencies' various loan programs are susceptible to the Year 2000 problem.

To avoid widespread system failures, the five key credit agencies have been fixing, replacing, or eliminating Year 2000 noncompliant systems. All of the systems that provide key cash flow data for the 10 loan programs we

reviewed have been identified as mission critical.³⁰ According to the agencies, these mission-critical systems that support the loan cost estimation process are either currently Year 2000 compliant or are scheduled to meet the OMB goal to be compliant by March 31, 1999. However, in its Quarterly Report: Progress on Year 2000 Conversion, as of mid-November 1998, OMB expressed concerns related to progress on Year 2000 conversion at Education and USDA. OMB noted that HUD and VA appear to be making satisfactory progress towards being Year 2000 compliant and pointed out that SBA was the first agency to report that all of its mission-critical systems were Year 2000 compliant. In previous reports and testimonies we have raised issues over the status of Year 2000 conversion efforts at the five key credit agencies, except for SBA. (See the list of GAO products related to Year 2000 efforts at the end of this report.)

To fully address Year 2000 risks that the five key credit agencies face, data exchange environment³¹ problems must also be addressed—a monumental issue. As computers play an ever-increasing role in our society, exchanging data electronically has become a common method of transferring information between federal agencies and private sector organizations. For example, Education's student financial aid data exchange environment is massive and complex. It includes about 7,500 schools, 6,500 lenders, and 36 guaranty agencies, as well as other federal agencies. All five key credit agencies depend on electronic data exchanges with external business partners to execute their lending programs. As computer systems are converted to process Year 2000 dates, the associated data exchange environment must also be made Year 2000 compliant. If the data exchange environment is not Year 2000 compliant, data exchanges may fail or invalid data could cause the receiving computer systems to malfunction or produce inaccurate computations. All five key credit agencies are working on plans to address data exchange issues with external business partners.

Because of these risks, the five key credit agencies must have business continuity and contingency plans to reduce the risk of Year 2000 business failures.³² Specifically, the five key credit agencies must ensure the

³⁰Mission-critical systems are those that support a core business activity or process.

³¹The data exchange environment includes the electronic transfer (sending or receiving) of a data set using electronic media. Electronic data exchanges can be made using various methods, including direct computer-to-computer exchanges over a dedicated network, direct exchanges over commercially available networks or the Internet, or exchanges of magnetic media such as computer tapes or disks. The information transferred in a data set often includes at least one date.

³²Year 2000 Computing Crisis: Business Continuity and Contingency Planning (GAO/AIMD-10.1.19, August 1998).

continuity of their core business processes and lending operations by identifying, assessing, managing, and mitigating their Year 2000 risks. These efforts should not be limited to the risks posed by Year 2000-induced failures of internal information systems but must include the potential Year 2000 failures of others, including external business partners.

The business continuity planning process focuses on reducing the risk of Year 2000-induced business failures. It safeguards an agency's ability to produce a minimum acceptable level of outputs and services in the event of failures of internal or external mission-critical systems. It also helps identify alternate resources and processes needed to operate the agency core business processes. While it does not offer a long-term solution to Year 2000-induced failures, it will help an agency to prepare for potential problems and may facilitate the restoration of normal service at the earliest possible time in the most cost-effective manner. All of the five key credit agencies have begun business continuity and contingency planning.

We are sending copies of this report to the Ranking Minority Member of the House Committee on the Budget. We are also sending copies to the Director, Office of Management and Budget; the Secretaries of Agriculture, Education, Housing and Urban Development, and Veterans Affairs; the Administrator of Small Business; and interested congressional committees. Copies also will be made available to others upon request.

Please contact me at (202) 512-9508 if you or your staffs have any questions concerning this report. Major contributors to this report are listed in appendix VIII.



Linda M. Calbom
Director, Resources, Community, and Economic Development
Accounting and Financial Management Issues

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Abbreviations

BLM	Budget Loan Model
FASAB	Federal Accounting Standards Advisory Board
FCRA	Federal Credit Reform Act
FHA	Federal Housing Administration
FSA	Farm Service Agency
GAAP	Generally Accepted Accounting Principles
HUD	Department of Housing and Urban Development
IG	Inspector General
MMI	Mutual Mortgage Insurance
NASS	National Agricultural Statistical Service
NSLDS	National Student Loan Data System
OMB	Office of Management and Budget
RD	Rural Development
SBA	Small Business Administration
SFFAS	Statement of Federal Financial Accounting Standards
USDA	Department of Agriculture
VA	Department of Veterans Affairs

Estimating Credit Program Costs

The Federal Credit Reform Act of 1990 (FCRA) was enacted to require agencies to more accurately measure the government's cost of federal loan programs and to permit better cost comparisons both among credit programs and between credit and noncredit programs. FCRA assigned to OMB the responsibility to coordinate the cost estimates required by the act. OMB is authorized to delegate to lending agencies the authority to estimate costs, based on written guidelines issued by OMB. These guidelines are contained in sections 33.1 through 33.12 of OMB Circular No. A-11, and supporting exhibits.¹

The Federal Accounting Standards Advisory Board (FASAB)² developed the accounting standard for credit programs, SFFAS No. 2, Accounting for Direct Loans and Loan Guarantees, which became effective with fiscal year 1994. This standard, which generally mirrors FCRA, established guidance for estimating the cost of direct and guaranteed loan programs, as well as recording direct loans and the liability for loan guarantees for financial reporting purposes.

The actual and expected costs of federal credit programs should be fully recognized in both budgetary and financial reporting. To determine the expected cost of a credit program, agencies are required to predict or estimate the future performance of the program. This cost, known as the subsidy cost, is the present value³ of disbursements—over the life of the loan—by the government (loan disbursements and other payments) minus estimated payments to the government (repayments of principal, payments of interest, other recoveries, and other payments). For loan guarantees, the subsidy cost is the present value of cash flows from estimated payments by the government (for defaults and delinquencies, interest rate subsidies, and other payments) minus estimated payments to the government (for loan origination and other fees, penalties, and recoveries).

To estimate the cost of loan programs, agencies first estimate the future performance of direct and guaranteed loans when preparing their annual

¹The act requires OMB to coordinate with the Congressional Budget Office in developing estimation guidelines.

²FASAB was created by OMB, Treasury, and GAO to consider and recommend accounting principles for the federal government. These three agencies approved Statement of Federal Financial Accounting Standards (SFFAS) No. 2, Accounting for Direct Loans and Loan Guarantees, in July 1993.

³Present value is the value today of a stream of payments in the future discounted at a certain interest rate. For the period we reviewed, when calculating the present value of loan subsidy costs, agencies must use as the discount rate the average annual interest rate for marketable U.S. Treasury securities with similar maturities to the loan or guarantee.

budgets. The data used for these budgetary estimates should be reestimated to reflect any changes in loan performance since the budget was prepared. This reestimated data is then used in financial reporting when calculating the allowance for subsidy (the cost of direct loans), the liability for loan guarantees, and the cost of the program. In the financial statements, the actual and expected cost of loans disbursed as part of a credit program is recorded as a “Program Cost” on the agencies’ Statement of Net Costs for loans disbursed.

In addition to recording the cost of a credit program, SFFAS No. 2 requires agencies to record direct loans on the balance sheet as assets at the present value of their estimated net cash inflows. The difference between the outstanding principal balance of the loans and the present value of their net cash inflows is recognized as a subsidy cost allowance—generally the cost of the direct loan program. For guaranteed loans, the present value of the estimated net cash outflows, such as defaults and recoveries, is recognized as a liability and generally equals the cost of the loan guarantee program.

In preparing SFFAS No. 2, FASAB indicated that the subsidy cost components—interest, defaults, fees, and other cash flows—would be valuable for making credit policy decisions, monitoring portfolio quality, and improving credit performance. Thus, agencies are required to recognize, and disclose in the financial statement footnotes, the four components of the credit subsidy—interest, net defaults, fees and other collections, and other subsidy costs—separately for the fiscal year during which direct or guaranteed loans are disbursed. FASAB is currently considering revising these standards.

In addition, nonauthoritative guidance is contained in the previously discussed Technical Release of the Credit Reform Task Force of the Accounting and Auditing Policy Committee, entitled Preparing and Auditing Direct Loan and Loan Guarantee Subsidies Under the Federal Credit Reform Act. This Technical Release provides detailed implementation guidance for agency staff on how to prepare reasonable credit subsidies. Further, the Technical Release provides suggested procedures for auditing credit subsidy estimates.

Developing Cash Flow Assumptions and Models

Agency management is responsible for accumulating relevant, sufficient, and reliable data on which to base the estimates. Further, SFFAS No. 2 states that each credit program should use a systematic methodology to project expected cash flows into the future. To accomplish this task,

agencies should develop cash flow models. A cash flow model is a computer-based spreadsheet that generally uses historical information and various assumptions including defaults, prepayments, recoveries, and the timing of these events to estimate future loan performance. These cash flow models, which should be based on sound economic, financial, and statistical theory, identify key factors that affect loan repayment performance. Agencies use this information to make more informed predictions of future credit performance. The August 1994 User's Guide To Version r.8 of the OMB Credit Subsidy Model provides general guidance on creating cash flow models to estimate future delinquencies, defaults, recoveries, etc. This user's guide states that "In every case, the agency or budget examiner must maintain current and complete documentation and justification for the estimation methods and assumptions used in determining the cash flow figures used for the OMB Subsidy Model" to calculate the credit subsidy.

According to SFFAS No. 2, to estimate the cost of loan programs and predict the future performance of credit programs, agencies should establish and use reliable records of historical credit performance. Since actual historical experience is a primary factor upon which estimates of credit performance are based, agencies should maintain a database, also known as an information store, at the individual loan level, of historical information on all key cash flow assumptions, such as defaults or recoveries, used in calculating the credit subsidy cost. Additional nonauthoritative guidance on cash flow models may be found in the Model Credit Program Methods and Documentation for Estimating Subsidy Rates and the Model Information Store issue paper prepared by the Credit Reform Task Force of the Accounting and Auditing Policy Committee. The draft "Information Store" Task Force paper provides guidance on the type of historical information agencies need to reasonably estimate the cost of credit programs. The information store should provide three types of information. First, the information store should maintain key loan characteristics at the individual loan level, such as the loan terms and conditions. Second, it should track economic data that influence loan performance, such as property values for housing loans. Third, an information store should track historical cash flows on a loan-by-loan basis. The data elements in an information store should be selected to allow for more in-depth analyses of the most significant subsidy estimate assumptions.

In addition to using historical databases and the cash flow models, other relevant factors must be considered by agencies to estimate future loan performance. These relevant factors include

- economic conditions that may affect the performance of the loans,
- financial and other relevant characteristics of borrowers,
- the value of the collateral to loan balance,
- changes in recoverable value of collateral, and
- newly developed events that would affect loan performance.

Reestimating Credit Subsidies

Agencies prepare estimates of loan program costs as a part of their budget requests. Later, after the end of the fiscal year, agencies are required to update or “reestimate” loan costs for differences among estimated loan performance and related cost, the actual program costs recorded in the accounting records, and expected changes in future economic performance. The reestimate should include all aspects of the original cost estimate including prepayments, defaults, delinquencies, recoveries, and interest. Reestimates of the credit subsidy allow agency management to compare the original budget estimates with actual program results to identify variances from the original estimate, assess the quality of the original estimate, and adjust future program estimates as appropriate. Any increase or decrease in the estimated cost of the loan program is recognized as a subsidy expense or a reduction in subsidy expense for both budgetary and financial statement purposes.

The reestimate requirements for interest rate and technical assumptions (defaults, recoveries, prepayments, fees, and other cash flows) differ. For budget purposes, OMB Circular A-11 states that agencies must reestimate the interest portion of the estimate when 90 percent of the direct or guaranteed loans are disbursed. The technical reestimate, for budgetary purposes, generally must be done annually, at the beginning of every year as long as the loans are outstanding, unless a different plan is approved by OMB,⁴ regardless of financial statement significance. For financial statement reporting purposes, both technical and interest rate reestimates are required annually, at the end of the fiscal year, whenever the reestimated amount is significant to the financial statements. If there is no

⁴The OMB representative with primary budget authority may authorize agencies to calculate technical reestimates for budgetary purposes less frequently than every year when any one of four conditions are met. These four conditions are (1) based on periodic schedules established in coordination with OMB, (2) when a major change in actual versus projected activity is detected, (3) when a significant difference is detected through monitoring “triggers” developed in coordination with OMB, and (4) when a group of loans are being closed out.

significant change in the interest portion of the estimate prior to the loans being 90 percent disbursed, then the interest reestimate may be done at least once when the loans are 90 percent disbursed.

Objectives, Scope, and Methodology

Our objectives were to assess (1) the ability of agencies' to reasonably estimate the cost of their loan programs, including whether they used practices identified by the Credit Reform Task Force¹ as being effective in making these estimates and (2) the status of agencies' efforts to ensure that computer systems used to estimate the cost of credit programs are Year 2000 compliant.

We selected a sample of 10 programs—5 direct loan programs totaling \$52.1 billion and 5 guaranteed loan programs totaling \$558.1 billion—from the five agencies with the largest domestic federal credit programs: the Small Business Administration, and the Departments of Education, Housing and Urban Development, Veterans Affairs, and Agriculture. We generally selected programs that had the most credit outstanding or highest loan levels at each agency. Specifically, these programs were:

- 7(a) General Business Loans Program and Disaster Loan Program, which totaled 72 percent of SBA's loan guarantees and 73 percent of its direct loans, respectively. 7(a) General Business Loans Program guarantees loans made to small businesses that are unable to obtain financing in the private credit market but can demonstrate the ability to repay the loan. Disaster loans are made to homeowners, renters, businesses of all sizes, and nonprofit organizations that have suffered uninsured physical property loss as a result of a disaster in an area declared eligible for assistance by the President or SBA.
- Federal Family Education Loan Program and William D. Ford Direct Loan Program, which totaled 100 percent of Education's loan guarantees and 50 percent of its total loans receivable, respectively. These two programs help pay for educational expenses incurred by vocational, undergraduate, and graduate students enrolled at eligible postsecondary institutions. The guaranteed loans are made by private lenders, insured by a state or private nonprofit guaranty agency, and reinsured by the federal government, whereas the direct loans are made directly from the federal government to the students.
- Mutual Mortgage Insurance Fund and the General and Special Risk Insurance Fund Section 223(f) Refinance, which totaled 81 percent of

¹The Credit Reform Task Force, formerly known as the Subgroup on Credit Reform of the Governmentwide Audited Financial Statements Task Force (established to study accounting and auditing issues related to credit reform implementation in preparation for the first audit of the governmentwide consolidated financial statements and to provide guidance to agencies to resolve these issues), is now a task force of the Accounting and Auditing Policy Committee sponsored by the Federal Accounting Standards Advisory Board (FASAB). This task force developed a Technical Release, Preparing and Auditing Direct Loan and Loan Guarantee Subsidies Under the Credit Reform Act, which has been approved by FASAB and is expected to be issued by the Office of Management and Budget as authoritative guidance during fiscal year 1999.

HUD's loan guarantees. The Mutual Mortgage Insurance Fund helps people become homeowners by providing insurance to lenders that finance the purchase of one-to-four family housing that is proposed, under construction, or existing, or lenders that refinance indebtedness on existing housing. The Special Risk Insurance Fund Section 223 (f) Refinance insures lenders against loss on the purchase or refinance of existing multifamily housing projects.

- Guaranty and Indemnity Fund and the Loan Guaranty Direct Loan Program, which totaled 100 percent of VA's post credit reform loan guarantees and 69 percent of its total loans receivable, respectively. The Guaranty and Indemnity Fund assists veterans and certain others in obtaining credit for the purchase, construction, or improvement of homes on more favorable terms than are generally available to nonveterans. The Loan Guaranty Direct Loan Program makes home loans on favorable terms to members of the general public—both veterans and nonveterans—purchasing a VA-owned property.
- Farm Service Agency Farm Operating Loans Program and the Rural Housing Service Single Family Housing Program, which totaled 20 percent of USDA's direct loans.² Farm Service Agency, Farm Operating Loans are made to family farmers who are unable to obtain credit from private and cooperative sources and are intended to help provide farmers with the opportunity to conduct successful farm operations. The Rural Housing Service, Single Family Housing Loans are made to very low- and low-income families who are without adequate housing and cannot obtain credit from other sources and may be used to build, purchase, repair, or refinance homes in rural areas.

To gain an understanding of the credit programs and the agencies' credit subsidy estimation process, we obtained and reviewed the fiscal years 1996 and where available 1997 financial statement audit work papers. During this review, we focused primarily on the auditor's review of the loans receivable and liability for loan guarantees line items on the balance sheet as well as the audit of the credit subsidy cost on the statement of operations. In addition, at VA, SBA, and HUD, we directly participated in the fiscal year 1997 financial statement audits as part of the federal government's first consolidated financial statement audit.

²At the end of fiscal year 1997, USDA reported that \$79.3 billion, nearly 78 percent of the direct loan portfolio, was either disbursed prior to the implementation of the Federal Credit Reform Act in fiscal year 1992 or consisted of price support loans that were excluded by Section 502(1) of the Federal Credit Reform Act. Thus, we focused on these two programs because they were the domestic loan programs subject to credit reform that had disbursed the largest volume of loans in less than 4 years.

To assess the reasonableness of agencies' credit subsidy estimation processes, we first performed sensitivity analyses of the SBA, HUD, and VA cash flow models to identify the key cash flow assumptions, which are those assumptions having the greatest impact on the credit subsidy. We used the sensitivity analyses performed by USDA and Education. To perform the sensitivity analyses, we obtained copies of the agencies' cash flow models and performed an extensive search to identify each root cash flow assumption³ in the agencies' cash flow model.

Once identified, each root cash flow assumption was adjusted, both up and down, by a fixed proportion. We followed the guidance in the Credit Reform Task Force's Technical Release Preparing and Auditing Direct Loan and Loan Guarantee Subsidies Under the Federal Credit Reform Act and adjusted each root cash flow assumption by 10 percent. To determine which root assumption had the greatest impact on the credit subsidy, we used the adjusted cash flows as input into OMB's credit subsidy model to recalculate the subsidy. For the recovery assumptions—generally the estimated amount agencies receive from selling collateral net of cash outflows for managing, maintaining, and selling foreclosed properties—we adjusted the recovery assumption along with the default timing assumption to ensure that recoveries occurred after the defaults.

Once we identified the key cash flow assumptions, we used the guidance in Statement on Auditing Standard No. 57, Auditing Accounting Estimates, as well as the Technical Release to determine whether agencies had a reliable basis—whether the agencies had gathered sufficient, relevant, and reliable supporting data—for the estimates of loan program cost and for their estimates of loan program performance. Because of VA's serious problems performing basic accounting for its loan programs, we determined that it would not be meaningful to further assess whether VA had sufficient, relevant, and reliable supporting data for its estimates of loan program costs. When possible, we used the work of the agencies' fiscal year 1997 financial statement auditors to determine whether agencies had a reliable basis for their estimates of loan program costs. We also compared program descriptions with agencies' cash flow models to determine whether all characteristics of the program were appropriately modeled. Further, we compared estimated loan program performance to actual loan program performance when appropriate, to determine whether material variances between the estimates and actual performance existed.

³The root cash flow assumption is the starting point for the assumption, which means that there are no preceding formulas or related inputs that would affect the assumption.

For two agencies, USDA and VA, this comparison was not meaningful, and therefore not performed, because of serious data quality concerns.

To determine whether agencies had implemented the practices identified in the Technical Release, we interviewed agencies' accounting, program, and budget staff and assessed the process agencies used to estimate the cost of their loan programs. We also compared the process agencies used to the practices identified in the Technical Release. Finally, we obtained and reviewed agencies' most recent action plans to address financial management weaknesses, including those related to estimating credit program costs.

We also reviewed the status of agency efforts to ensure that computer systems that provide cash flow data used to estimate the cost of credit programs were Year 2000 compliant. To do this, we met with cognizant agency officials and identified the systems that provide data supporting key cash flow assumptions and determined whether the agency had assured that these systems were currently, or were scheduled to be on time for Year 2000 compliance. We also reviewed the agencies' Year 2000 compliance plans and status reports to OMB. We did not independently test the systems that provide data supporting key cash flow assumptions to determine whether the systems were Year 2000 compliant as reported to OMB. Further, we discussed the agencies' efforts to develop contingency plans designed to ensure the continued operation of critical business processes despite system failures. Our work was conducted in Washington, D.C., and St. Louis, Missouri, from September 1997 to November 1998 in accordance with generally accepted government auditing standards.

Comments From the Small Business Administration



U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

January 7, 1999

Mr. Gene Dodaro
United States General Accounting Office
Accounting and Information Management Division
Washington, DC 20548

Dear Mr. Dodaro:

The Small Business Administration has reviewed the Draft Report on Credit Reform and agree with the findings of the report.

As we read the report, we noticed that the SBA is always discussed first in each section of the report and it appears that SBA has the highest level of achievement and the fewest unresolved problems of the five federal credit agencies. In our discussions with the GAO team, they basically acknowledged that our perception about SBA achievements and the structure of the report was accurate. We request that, if possible, your report more clearly state some of the superlatives about SBA that we heard from the GAO staff.

Improving the accuracy of our subsidy rates has been a top priority of Administrator Alvarez and she has backed up that priority with additional resources for my office. We have come a long way in a very short time and I'm extremely proud of the people on our staff who have made this happen. In addition to building our dedicated, competent, highly motivated staff, we have taken several steps to ensure that SBA maintains a leadership position in this field. These include:

- Constant improvement of our extensive historical database and analytical methods.
- Improved continuing dialogue with program staff, management, OMB, auditors and others, so that problem issues can be resolved fully and completely.
- More formal procedures to insure data accuracy and internal control.

Thank you for your recognition of SBA's progress in this challenging area.

Sincerely,

A handwritten signature in cursive script, appearing to read "J. Wilson".
J. Larry Wilson
Chief Financial Officer

Comments From the Department of Education

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



UNITED STATES DEPARTMENT OF EDUCATION
OFFICE OF THE UNDER SECRETARY

Linda M. Calbom, Director
Resources, Community and Economic Development
Accounting and Information Management Division
U.S. General Accounting Office

Dear Ms. Calbom:

Thank you for the opportunity to review the draft report, "Credit Reform: Key Credit Agencies Had Difficulty Making Reasonable Loan Program Cost Estimates," GAO/AMD-99-31. We would like to clarify a number of issues underlying the report's conclusion regarding the Department of Education's budget estimates.

The draft report questions the reliability of the Department's budget estimates, focusing on the contention that the National Student Loan Data System (NSLDS)—the data source underlying these estimates—is of "questionable validity." Despite the revisions made in response to comments from the Department's Office of the Inspector General on this issue, we believe that the draft report does not provide a basis for this contention.

As your draft report states, estimates for the Department's financial statements were based on data received from ten guaranty agencies. As noted in the Report on Internal Controls accompanying the FY 1997 audit, these data were collected because auditors determined that this approach was "more practicable than a direct validation of the data in NSLDS." (Guaranty agencies are also the source of FFEL data in NSLDS.) The decision to collect these data was therefore not a reflection of the quality of NSLDS as a data source.

As your report correctly notes, separate estimates were prepared using both NSLDS and guaranty agency data. The report goes on to state that these estimates were not comparable; this is not correct. As the Department expected, estimates from the two data sources were highly comparable. It was only after adjustments were made to the guaranty agency-based estimates based on recommendations from the Department's auditors that the estimates diverged. When similar adjustments were applied to the NSLDS-based estimates, the two projections were again highly comparable. It should also be noted that while the audit estimates were based on guaranty agency data, that data was "informed" by calculations developed from NSLDS to obtain the level of detail needed to develop an auditable liability estimate for current loans. Thus, the contention that the FY 1997 audit findings call into question the validity of NSLDS data is both an oversimplification of the audit's results and a misrepresentation of a highly technical, year-long process.

The Department chose to base its budget estimates on NSLDS for a number of reasons. We believe that NSLDS data are better for predicting future costs. As noted in the internal control report, the usefulness of the guaranty agency data collected in 1997 diminishes for FY 1998 and beyond, the period that is the primary focus of the Department's budget estimates. In addition, the guaranty agency data was not sufficiently detailed to provide inputs at the level required for

600 INDEPENDENCE AVE., S.W. WASHINGTON, D.C. 20202

Our mission is to ensure equal access to education and to promote educational excellence throughout the Nation.

See comment 1.

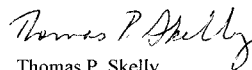
**Appendix IV
Comments From the Department of
Education**

the Department's budget model. Lastly, and most significantly in the context of your report, the adjustments developed during the audit—which primarily involve collections related to consolidations of defaulted loans from the early 1990's—were incorporated into the Department's accounting structure and used in preparing the budget forecast. As a result, the Department believes that its budget estimates are valid and firmly based on the best available data.

In addition to this fundamental point, the Department also has a number of smaller clarifications. (1) The Department's budget model is used in concert with, rather than lieu of, the OMB credit subsidy model. As with all other Federal credit programs, subsidy rates for the student loan programs are generated by the OMB model. (2) On page 63, the second paragraph states that the Direct Loan Program accounts for 67 percent of the Department of Education's Direct Loans. This figure should be 100 percent (see the FY 1997 Audited Financial Statement, Consolidating Statement of Financial Position). (3) This paragraph also limits its discussion to Stafford Loans. In fact, the Federal Family Education Loan and William D. Ford Direct Loan programs contain loans other than Stafford such as Unsubsidized Stafford, PLUS, and Consolidated.

I would be happy to discuss these issues further at your convenience. Please call me on (202) 401-1700 if you have any questions. Thank you.

Sincerely,



Thomas P. Skelly
Director
Budget Service

cc : Donald Rappaport
John P. Higgins, Jr.
Linda Paulsen
D. William Graham

The following are GAO's comments on the Department of Education's January 12, 1999, letter.

GAO Comments

1. See "Agency Comments and Our Evaluation" section for Education.
2. We agree with Education's statement that the agency uses its budget model in concert with rather than in lieu of the OMB credit subsidy model. The report was revised accordingly.
3. When calculating the portion of Education's direct loans receivable that was included in the scope of our review, we included the defaulted loan guarantees and facilities loans as part of the total direct loans receivable universe. However, Education does not consider these loans to be direct loans, but does consider them to be part of total credit program receivables. While our review did cover 100 percent of what Education considers to be direct loans, we believe it is appropriate to continue to reflect our scope of loans reviewed as a percentage of total credit program receivables. Further, to be consistent with the information available from other key credit agencies, we revised the direct loan scope percentage to exclude the allowance for subsidy. As a result, the scope calculation for this review was revised to 50 percent of total credit program receivables.
4. We agree with Education's statement that Stafford Loans should not be included in the program titles and revised the report accordingly.

Comments From the Department of Housing and Urban Development



U. S. Department of Housing and Urban Development
Washington, D.C. 20410-8000

JAN 13 1999

OFFICE OF THE ASSISTANT SECRETARY
FOR HOUSING-FEDERAL HOUSING COMMISSIONER

Mr. Gene L. Dodaro
Assistant Comptroller General
U.S. General Accounting Office
Washington, DC 20548

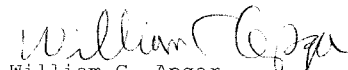
Dear Mr. Dodaro:

Thank you for the opportunity to comment on GAO's draft report entitled "Credit Reform: Key Credit Agencies Had Difficulty Making Reasonable Loan Program Cost Estimates." HUD has made significant strides to improve its loan program cost estimates. We believe that the actions we have taken have improved our capability to develop reasonable loan program cost estimates.

We agree with GAO's recommendations and will implement existing plans to accumulate sufficient supporting data for the credit program cost estimates, compare estimated cash flows to actual cash flow experience, revise our reestimate approach in a way that will result in timely credit subsidy reestimates for financial statements and budget submissions, and develop written policies and procedures for estimating the cost of credit programs.

We would like to express our appreciation to Dan Blair, Assistant Director of Accounting and Information Management Division, and his team for the guidance and assistance that we were afforded during this review.

Sincerely,


William C. Apgar
Assistant Secretary for Housing-
Federal Housing Commissioner

Comments From the Department of Veterans Affairs

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



DEPARTMENT OF VETERANS AFFAIRS
ASSISTANT SECRETARY FOR POLICY AND PLANNING
WASHINGTON DC 20420

JAN 15 1999

Mr. Gene L. Dodaro
Assistant Comptroller General
Accounting and Information Management Division
U. S. General Accounting Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Dodaro:

We have reviewed your draft report, ***Credit Reform: Key Credit Agencies Had Difficulty Making Reasonable Loan Program Cost Estimates*** (GAO/AIMD-99-31). We agree that all accounting deficiencies related to the loan sales program and the direct loan inventory must first be resolved before VA can proceed to implement improved cost estimation practices.

GAO observed correctly that the Department experienced difficulties when it transferred the management of its direct loan portfolio to an outside servicer. This was due to a series of events including centralizing our portfolio loan processing, and replacing VA's in house-designed system with a proprietary system. The 24,100 loans transferred were handled properly with some exceptions. However, we believe that GAO's concentrating on the exceptions ignores the perspective that this is only 2/10ths of 1 percent of VA's loan guaranty business and should not be considered material in terms of the GAO evaluation of VA's entire loan program.

VA believes, we can implement your report's four cash flow, credit subsidy recommendations with the parallel effort now underway of correcting the direct loan records. We have already corrected the accounting issues. Also, VA has a contractor on board assisting us in the credit subsidy model estimates and reestimates. We believe the 23 deliverables to be completed this year address all the portfolio budget, program, and accounting issues.

The enclosure details concerns that we have with the draft. Thank you for the opportunity to comment on your report.

Sincerely,

A handwritten signature in black ink, appearing to read "Duffy".

Dennis Duffy

Enclosure

See comment 1.

See comments 1 and 2.

Enclosure

DEPARTMENT OF VETERANS AFFAIRS COMMENTS TO
GAO DRAFT REPORT, *Credit Reform: Key Credit Agencies Had Difficulty
Making Reasonable Loan Program Cost Estimates*
(GAO/AIMD-99-31)

GAO recommends that the Secretary of Veterans Affairs or his designee implement the following cost estimation practices:

1. compare estimated cash flow experience to validate the quality of the estimates as part of the annual reestimation process,
2. develop and implement written policies and procedures that include a formal supervisory review process and a coordinated approach between program, budget, and accounting staff for estimating the cost of credit programs, and
3. use sensitivity analyses as a tool to identify cash flow assumptions,
4. continue efforts, with the assistance of contractors, to create and utilize a model and develop the necessary data to calculate the liability for the guarantee on sold loans and record the related liability in the financial statements.

Concur - VA will implement GAO's four cash flow credit subsidy recommendations with the parallel effort now underway of correcting the direct loan records. We have already corrected the accounting issues. Also, VA's contractor, now on board, is assisting us in the credit subsidy model estimates and reestimates. We believe the 23 deliverables to be completed this year address all the portfolio budget, program, and accounting issues that GAO raises.

Additional Comments:

On Page 3 The report states, "VA had fundamental problems in maintaining accountability over its loan portfolio."

This statement is misleading, implying that VA has no control over its loan portfolio. Actually a few problems exist with respect to accounting for a small portion of the portfolio loans, less than 5 percent of the entire program.

On Page 6 The report states, "VA faced significant problems performing routine accounting for its loan programs including loss of accountability over certain loans transferred to an outside servicer."

The initial transfer of the workload from 46 field offices to a centralized location and outsourcing the work does create initial transition problems. However, a few problems within the 5 percent workload transfer does not truly reflect the program. In fact, we

Now on p. 2.

See comment 1.

Now on p. 4.

Enclosure

DEPARTMENT OF VETERANS AFFAIRS COMMENTS TO
GAO DRAFT REPORT, *Credit Reform: Key Credit Agencies Had
Difficulty Making Reasonable Loan Program Cost Estimates*
(GAO/AIMD-99-31)
(Continued)

quickly brought the workload backlog of slightly more than 10,000 loans into the new process. The ongoing process is functioning smoothly with minor operational issues.

Now on p. 4.

On Page 7 The report states, "VA has prepared an action plan that addresses some of its financial management problems. The plan focuses on resolving the fundamental accounting problems for the loan sales program and the basic data integrity issues related to the incomplete loan inventory maintained by the servicer."

See comment 3.

This does not correctly reflect VA's Action Plan milestones and objectives. VA's plan is, in fact, addressing GAO, IG, OMB and VA issues as part of one approach to deal with a broad spectrum of financial, program, and systems issues and improvements. GAO gives no credit to VA's cross organizational approach even though the report clearly states all of the 26 milestones and 230 action items by target date. VBA forwards a quarterly report to Department level management and OMB to track our progress.

See comment 1.

As for any "basic data integrity issues related to the incomplete loan inventory," we are aware of some loan records not being provided timely or accurately to the contract servicer. This does not translate to a catastrophic situation when only 350 loans (.097%) out of 360,000 guaranteed and direct loans experienced some problems. GAO reviewed our operation immediately upon our conversion to a centralized operation, which was also outsourced. VA placed a great deal of emphasis on assuring that the daily operational problems were corrected and that clean-up of the transition work occurred immediately for the loan records.

See comment 2.

Now on p. 10.

On Page 17 The report states that GAO reviewed the "Guaranty and Indemnity Fund and the Loan Guaranty Direct Loan Program, which totaled 100 percent of VA's loan guarantees and 69 percent of its direct loans."

See comment 4.

GAO claims to have reviewed the entire VA loan portfolio of vendee, acquired, and direct loans. However, their mix of funds and programs is confusing and could lead to an inaccurate assumption of what may have been reviewed.

- While the GIF Fund may cover 100% of new loans being guaranteed, it does not include all guaranteed loans made prior to January 1, 1990, which would constitute a substantial portion of outstanding guaranteed loans.
- For direct loans, the Loan Guaranty Direct Loan Program has been effectively defunct for 20 years. VA makes many direct "vendee" loans to borrowers purchasing properties from VA, and we also acquire a number of guaranteed loans, thereby changing them to direct loan status. GAO's more detailed description on

Enclosure

DEPARTMENT OF VETERANS AFFAIRS COMMENTS TO
GAO DRAFT REPORT, *Credit Reform: Key Credit Agencies Had
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(GAO/AIMD-99-31)
(Continued)

page 64 indicates that the 69% of direct loans reviewed actually applied to the vendee home loan program.

- We also have a small pilot program of direct loans to Native Americans.

On Page 37 Under the heading "Major Deficiencies in Basic Loan Accounting System...", the report states, "VA had serious problems performing basic accounting for its loan programs" which "call into question its ability to effectively manage and monitor its loan programs."

This deals with problems encountered on VA's loan portfolio, which comprises a small percentage (less than 10% of the activity on an annual basis) of the overall program. The degree of materiality attributed to VA's home loan program relative to the few problems in this relatively small portion of VA's credit programs seems out of proportion.

This area appears to refer back to the non-established loans, which cumulatively numbered less than 300 (or .097%) as of October 1, 1997. The problem revolves around a specialized universe of refunded and repurchased loans that result in about 200 loan establishments monthly. In addition to these types of loans, VA also establishes 1,000 or more vendee loans monthly with little if any problems. Again, the question is of materiality, especially since the subject is direct loans, which are a small part of VA's overall Housing Credit Program.

On Page 38 The report states that VA shut down a loan servicing system without adequate procedures to maintain accountability over its loan portfolio, did not know the number of loans outstanding at year end, and contributed to the servicer's inability to allocate \$3 million in loan payments.

In this section, GAO relates \$3 million in payments to \$2.1 billion in direct loans outstanding. Of the \$2.1 billion, \$0.7 billion represents loans receivable debts on guaranteed loan foreclosures. While \$3 million, by itself, is a high figure, it is about 2/10ths of 1 percent of the value of the \$1.4 billion in direct outstanding direct loans receivable at the end of the year.

On the average, \$3 million represents the value of about 60 direct home loans. At conversion to contract servicing in June 1997, VA transferred about 24,100 loans to the servicer's control. The size of the VA portfolio fluctuates in relationship to the latest vendee loan sales. Therefore, while VA admits it has some problems, we do not believe that the current state indicates a total inability to manage and monitor loan assets.

Enclosure

DEPARTMENT OF VETERANS AFFAIRS COMMENTS TO
GAO DRAFT REPORT, ***Credit Reform: Key Credit Agencies Had***
Difficulty Making Reasonable Loan Program Cost Estimates
(GAO/AIMD-99-31)
(Continued)

VA has received much more than \$3 million dollars after the transfer to contractor servicing. We are unsure what this \$3 million refers to – either the approximately \$710,000 (at one time) in payments for non-established loans or the approximately \$3.5 million in suspense funds that are held temporarily for a variety of reasons (primarily for instructions regarding short payoffs). It appears that GAO is referring to the smaller amount of non-established loans.

Under either scenario, the number of loans is a small part of the overall number of direct loans in process. Unfortunately, both non-established loans and loans in suspense will always occur for a brief time. VA is trying to minimize the time these loans are not processed. While VA does believe improvement is needed in these areas, the materiality is questionable when considered in context with the entire VA loan program

The following are GAO's comments on the Department of Veterans Affairs' January 15, 1999, letter.

GAO Comments

1. See the "Agency Comments and Our Evaluation" section for VA.
2. We do not agree that VA has already corrected the accounting issues discussed in this report. In September 1998, we visited VA's servicer and concluded that the problems described in this report—including the servicer's inability to monitor the amount and timing of cash due from borrowers, its inaccurate and incomplete loan histories, and its inability to allocate payments received from borrowers to the appropriate borrower's account—continued to exist.
3. When reviewing VA's action plan, we focused only on those initiatives designed to address the basic accounting weaknesses VA had with its credit programs because this was the scope of our review. Thus, we did not focus on other actions described by VA because they were beyond the scope of this review.
4. While the specific scope of this review was the Guaranty and Indemnity Fund and the Loan Guaranty Direct Loan Program, VA provided us with one model for its guaranteed loan program and one model for its direct loan program that included both the "vendee" and acquired loans. However, only one subsidy cost is produced per model. Since the direct loan model included both types of loans, we could not determine the amount of subsidy attributable to each loan type. As a result, we reviewed 100 percent of VA's post credit reform loan guarantees and 69 percent of its total loans receivable. To further clarify this, the report was revised to better describe our scope determination.
5. This report does not focus on VA's "non-established loans." However, this is being covered in a review that is now ongoing.
6. The \$3 million referred to in our report relates to monthly loan payments or loan payoff amounts that VA received which it could not match to a borrower. The existence of this condition calls into question the completeness of VA's loan records and seriously undermines its ability to monitor the performance of existing loans and reasonably estimate the future performance of its credit programs.

Comments From the Department of Agriculture

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20250

JAN 11 1999

Ms. Linda M. Calbom
Director
Resources, Community, and Economic Development
Accounting and Financial Management Issues
General Accounting Office
Washington, D.C. 20548

Dear Ms. Calbom:

Enclosed is the consolidated response from the Rural Development mission area and Farm Service Agency (FSA) to the draft audit report RCED-99-31 concerning Credit Reform.

We appreciate the opportunity given to both Rural Development and FSA to submit comments on this draft report and look forward to working with your office on improving the credit reform process.

If we can be of any further assistance on the response to this draft report, please contact Victoria L. Bateman, Chief Financial Officer, Rural Development, at (202) 692-0119, or James R. Little, Chief Financial Officer, FSA, at (703) 305-1386.

Sincerely,


Jill Long Thompson
Under Secretary
Rural Development

Enclosure

AN EQUAL OPPORTUNITY EMPLOYER

Consolidated response to the General Accounting Office (GAO) draft report, RCED-99-31, Credit Reform: Key Credit Agencies Had Difficulty Making Reasonable Loan Program Cost Estimates.

RURAL DEVELOPMENT

See comment 1.

Rural Development believes that the primary issue that needs to be resolved is the amount of detailed history that is necessary to make reasonable predictions of future loan performance.

We believe the cost associated with developing and maintaining extensive pre-credit reform detailed history for each loan cohort would provide only limited return in predicting the future cash flows required by the Office of Management and Budget (OMB) credit reform model. Rural Development loan history is typically altered by significant economic, legislative, or program changes. For example, the future cash flow impact of implementing centralized borrower servicing and escrowing taxes and insurance cannot be logically assessed based on loan history.

Similarly, loan history is of limited value in predicting future economic events (e.g., high unemployment rates in rural areas) critical to predicting default rates (which in turn impact the cash flow of each individual cohort differently).

See comment 2.

Rural Development has committed significant resources to credit reform implementation. Massive system changes were made to control funds, track cohorts, and respond to required financial and budgetary reporting. Rural Development has taken the following specific actions over the last two years to address credit reform issues:

See comment 3.

1. In May 1997, the Under Secretary hired Rural Development's Chief Financial Officer (CFO). The Under Secretary combined the Budget Division and St. Louis Finance Office under the CFO which has greatly enhanced our ability to work together under one management to address budgetary and financial statement issues related to credit reform.
2. A workplan was developed to address each of the Office of Inspector General's (OIG) issues, and deadlines were accelerated in coordination with OIG.
3. A joint task force was formed with the CFO, OIG, and OMB to overcome issues on auditing credit reform baseline and reestimate numbers.
4. Documentation for each cohort variable has been expanded, and revised cash flow models are being developed.

5. Procedures have been revised to complete the reestimate process at fiscal year-end and an analysis of historical data has been completed to support this process.
6. Coordination with the Federal Accounting Standards Advisory Board, Accounting and Auditing Policy Committee, OMB, and Treasury continues on an ongoing basis to resolve outstanding government-wide credit reform issues.

We continue to work with OIG in developing and refining cash flow models for use in budgeting for credit programs and implementing procedures to complete reestimates at year-end (which was completed for Fiscal Year (FY) 1998 Financial Statements). To attempt to go back in history for the pre-credit reform portfolio would only serve to detract resources from the current efforts to address long term system and data needs. With the continued growth in the number of cohorts within USDA, even our current procedures will eventually give way to continued resource restraints.

See comment 4.

Rural Development would like to address a major inaccuracy in the description of how the interest subsidy works. Under the Single Family Housing program draft report on page 44 describes the program as making low interest loans to loan income borrowers. However, the loans are made at the designated interest rate and low income borrowers interest rate is subsidized. The note interest rate never varies. This difference has major ramifications when it comes to recapture. USDA never charges the borrower more interest; USDA decreases the subsidy on the interest rate the borrower is already charged.

See comment 5.

Now on p. 27.

Rural Development - Year 2000 Conversion

Rural Development has 14 mission critical systems, 11 of which were made Year 2000 compliant and placed into production last fiscal year. The remaining 3 systems will be placed into production in February 1999. All data exchanges with outside entities have been validated and concurrences received through signed memorandums of agreement. A Business Continuity Plan has been developed. A wide variety of hardware that includes servers, distributed processors, personal computers, production mail equipment, scientific/lab equipment, and LAN/WAN VOICE telecommunication systems have been made Year 2000 compliant.

See comment 6.

Ninety percent of a sophisticated call center supporting centralized servicing of the single family housing, loan portfolio has been made Year 2000 compliant with the remaining 10% to be finished in February 1999. All personal computers in the St. Louis, Missouri and Washington, DC offices have been made Year 2000 compliant.

Rural Development successfully completed a significant amount of Year 2000 conversion work on or ahead of schedule. The remaining workload will be completed on schedule. The entire Year 2000 conversion will be accomplished within budgetary guidelines.

FARM SERVICE AGENCY

This provides the Farm Service Agency's (FSA) comments on the GAO draft audit report. FSA believes GAO provided an objective assessment of issues relating to the Department of Agriculture, with the exception of certain statements made in the report concerning USDA financial systems. Both FSA and Rural Development expressed concerns on those statements during the January 5, 1999, exit conference, which GAO's draft revision, received January 7, 1999, generally reflected. We have provided the following comments.

See comment 7.

As clarification to a statement made in the exit conference, FSA did not use FY 1998 end-of-year actuals to calculate FY 1997 reestimates. As reported in the draft audit, GAO acknowledged that USDA had an OMB waiver permitting us to calculate reestimates in the summer following the financial statement reporting year. We do plan to perform reestimates for the current year's financial statement utilizing the "Balances Approach." FSA is proactively participating in the OMB pilot test of the "Balances Approach" and the impact on cash flow models. Implementation was originally scheduled for FY 1998 but has been delayed by OMB because of the need for additional testing. We will incorporate the "balances" approach as a component of our next reestimate.

See comment 8.

As mentioned in the exit conference, we believe GAO should make some positive statements on what progress USDA has made in improving this process. With respect to FSA, we have made considerable progress working with the National Agricultural Statistical Service (NASS), and we continue to work with them contractually to improve our model. We are currently working with NASS to:

- improve our cash flow model, which is a continuing process. We plan to have all of the points raised by the latest OIG audit preliminary findings, dated December 8, 1998, incorporated before the next reestimate cycle.
- perform a sensitivity analysis on all appropriate FSA Farm Loan Programs, not just the direct Farm Operating Program. Based on the results of the sensitivity analysis and other internal analyses already performed, our budget and financial offices will work closely together to update the actual data (cohort) spreadsheets. We will continue to work with our program staffs to ensure we have the historical and/or economic data to support budget assumptions and projections.

We have worked closely with OIG to expand current documentation relating to our subsidy calculations and are currently in discussions with OIG to establish the best way to simplify our model and increase the level of documentation in coordination with our program and budget staffs.

We have had considerable success with NASS and plan to continue that contractual relationship. We do not believe it would be in FSA's best interest to participate in the GAO-suggested USDA combined contractual effort. We have a proven track record with NASS and believe they can accomplish the same tasks recommended by GAO, potentially at significantly lower costs.

Appendix VII
Comments From the Department of
Agriculture

See comment 9.

Complying with the ever-evolving credit reform standards is becoming a full time profession, and credit reform agencies appear to be in a no-win situation as the regulatory agencies continue to refine the requirements and the oversight agencies continue to "raise the bar" on their expectations. While we continue to make improvements, the requirements and standards continue to change. Based on comments made during the GAO exit conference and our continual discussions with OIG, it is apparent that the bar will probably continue to move, and credit reform will become an increasing and untenable drain on human and information technology resources. This became imminently clear in GAO's implication that we should be factoring in localized economic conditions throughout the country along with borrowers' repayment histories (specifically relating to borrowers who are required to graduate to a higher or degenerate to a lower interest rate due to economic and/or income conditions) to predict future repayment streams. Requiring agencies to develop complicated cash flow models dependant on localized or regional economic conditions would be of questionable value and would be a severe drain on our already limited human resources; it could also have a significant impact on our information technology resources but could not detract from our FY 2000 efforts. Since credit reform subsidies reflect estimates, "reasonableness" should be our watchword and benchmark, rather than "finiteness."

The following are GAO's comments on the Department of Agriculture's January 11, 1999, letter.

GAO Comments

1. We agree that USDA needs to determine the appropriate amount of detailed history needed to make reasonable predictions of future loan performance. The amount of history needed for each loan program would likely vary by program type and complexity and be closely linked to the quality and type of history agencies had available. However, we do not agree that loan history is of limited value where program or economic changes have occurred. Historical experience should be used as the baseline for an agency's credit subsidy estimate. Once this baseline is established, the incremental changes in cash flows due to expected changes in the current and forecasted economic conditions as well as changes in program design or delivery should be adjusted for. In addition, USDA should compare the estimates of loan performance for the changed credit program to the most recent historical experience to ensure that current estimates are reasonably predicting actual loan program performance. However, as discussed in our report, USDA was not routinely comparing its estimates of loan program costs with actual historical experience.

Further, we agree that extensive pre-credit reform detailed loan history may not be required in all cases and, in some cases, reliable summary level information may be acceptable. However, because nearly 73 percent of USDA's reported loan portfolio is comprised of pre-credit reform loans, we believe that this experience is relevant to USDA's current estimates of loan performance and, therefore, should be considered at some level.

2. While we agree that USDA has made system changes to help control funds, track cohorts, and respond to financial and budgetary reporting needs, further work is needed. USDA officials told us that the current systems configuration does not allow the systems to summarize the data so that it is readily usable for calculating credit subsidy estimates. Until these systems are able to readily provide reliable key cash flow data in a format that can be easily used in the subsidy estimation process, USDA's ability to calculate reasonable credit subsidy estimates will continue to be impaired.

3. We agree that some progress has been made by USDA in the past 2 years in addressing the challenges it faces preparing reasonable estimates of its loan program costs; however, the benefits of these and planned future

actions have not yet been fully realized. Further, as explained in comment 2, until USDA's systems readily provide reliable supporting data for the credit subsidy estimates, the ultimate success of these actions may be jeopardized.

4. Although we acknowledge that USDA has a large number of loan programs, the amount of work needed to prepare reasonable credit subsidy estimates can be reduced by optimizing its computer systems' abilities and appropriately configuring these systems to readily provide reliable data for the loan cost estimation process.

5. We did not intend to imply, and did not state in our draft report, that the note interest rate varied based on the borrower's income. To avoid further confusion on this point, the report was revised to clarify that the amount of interest subsidy paid by USDA changes when a borrower's income changes. Further, the lack of support for USDA's interest subsidy assumption for this loan program could affect the estimates of the amount of interest subsidy that would be recaptured (the amount of interest subsidy a borrower may be required to repay upon sale of the property).

6. The Year 2000 section of this report focused on the status of systems managed at the USDA agency level and did not address systems managed by components such as Rural Development. We did not verify the status of Rural Development's Year 2000 compliance efforts.

7. The report was revised to reflect the agency's comment.

8. See "Agency Comments and Our Evaluation" section for USDA.

9. We do not agree that because of ever-evolving credit reform standards that agencies appear to be in a no-win situation and oversight agencies continue to raise the bar on their expectations. The requirements and standards have changed little since the Federal Credit Reform Act became effective in 1992 and the related accounting standards became effective in 1994. Since this time, OMB, Treasury, and the Accounting and Auditing Policy Committee's credit reform task force (which included representatives from USDA) have been working to help provide agencies with detailed guidance on how to implement credit reform requirements. Further, as demonstrated by the Small Business Administration and the Department of Education, some agencies are able to prepare reasonable credit subsidy estimates. Finally, when forecasting loan repayments for a credit program whose performance is directly linked to economic

conditions, econometric models are an appropriate tool because they would consider the impact of economic conditions on estimated future loan repayments. Econometric modeling techniques are not new and have been successfully used by at least one of the five key credit agencies in their estimation processes.

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Appendix VIII
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Related GAO Products

Credit Reform

Credit Reform: Greater Effort Needed to Overcome Persistent Cost Estimation Problems ([GAO/AIMD-98-14](#), March 30, 1998).

Credit Reform: Review of OMB's Credit Subsidy Model ([GAO/AIMD-97-145](#), August 29, 1997).

Credit Subsidy Estimates for the Sections 7(a) and 504 Business Loan Programs ([GAO/T-RCED-97-197](#), July 15, 1997).

Credit Reform: Case-by-Case Assessment Advisable in Evaluating Coverage, Compliance ([GAO/AIMD-94-57](#), July 28, 1994).

Federal Credit Programs: Agencies Had Serious Problems Meeting Credit Reform Accounting Requirements ([GAO/AFMD-93-17](#), January 6, 1993).

Year 2000 Computing Crisis

Year 2000 Computing Crisis: Significant Risks Remain to Department of Education's Student Financial Aid Systems ([GAO/T-AIMD-98-302](#), September 17, 1998).

Year 2000 Computing Crisis: Strong Leadership and Effective Partnerships Needed to Reduce Likelihood of Adverse Impact ([GAO/T-AIMD-98-277](#), September 2, 1998).

Year 2000 Computing Crisis: Progress Made in Compliance of VA Systems, But Concerns Remain ([GAO/AIMD-98-237](#), August 21, 1998).

Year 2000 Computing Crisis: Business Continuity and Contingency Planning ([GAO/AIMD-10.1.19](#), August 1998).

Year 2000 Computing Crisis: Actions Needed on Electronic Data Exchanges ([GAO/AIMD-98-124](#), July 1, 1998).

Year 2000 Computing Crisis: USDA Faces Tremendous Challenges in Ensuring That Vital Public Services Are Not Disrupted ([GAO/T-AIMD-98-167](#), May 14, 1998).

Year 2000 Computing Crisis: Strong Leadership Needed to Avoid Disruption of Essential Services ([GAO/T-AIMD-98-117](#), March 24, 1998).

Related GAO Products

Veterans Affairs Computers Systems: Actions Underway Yet Much Work Remains to Resolve Year 2000 Crisis ([GAO/T-AIMD-97-174](#), September 25, 1997).

Year 2000 Computing Crisis: An Assessment Guide (GAO/AIMD-10.1.14, September 1997).

Veterans Benefits Computer Systems: Uninterrupted Delivery of Benefits Depends on Timely Correction of Year 2000 Problems ([GAO/T-AIMD-97-114](#), June 26, 1997).

Veterans Benefits Computers Systems: Risk of VBA's Year 2000 Efforts ([GAO/AIMD-97-79](#), May 30, 1997).

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