

GAO

Report to the Honorable
Bruce F. Vento, House of
Representatives

September 1993

RESOLUTION TRUST CORPORATION

Data Limitations Impaired Analysis of Sales Methods



150090

**RESTRICTED--Not to be released outside the
General Accounting Office unless specifically
approved by the Office of Congressional
Relations.**

05 2013 150090 RELEASED



United States
General Accounting Office
Washington, D.C. 20548

General Government Division

B-253986

September 27, 1993

The Honorable Bruce F. Vento
House of Representatives

Dear Mr. Vento:

On April 30, 1992, you requested that we review the Resolution Trust Corporation's (RTC) portfolio sales. Under this sales strategy, RTC groups loans and/or real estate assets with similar characteristics into portfolios of various sizes. In an August 27, 1992, letter we explained that RTC did not have an automated system that records portfolio sales activities and discussed our approach for reviewing RTC's overall asset disposition goals and strategies. Subsequently, as agreed with your office, we reviewed RTC's report, Hard-to-Sell Assets Review Project (Dec. 1, 1992), which included an analysis of RTC's asset recoveries. In this report, we provide our assessment of the statistical analysis portion of the RTC report and of the validity of RTC's recovery results.

Results in Brief

Although RTC used appropriate analytical methods, data limitations hindered its efforts to analyze three of its sales strategies—(1) Standard Asset Management and Disposition Agreement (SAMDA) contractor sales, (2) portfolio sales, and (3) auction sales. The results of RTC's hard-to-sell¹ assets statistical analysis were impaired because RTC did not always have sufficient sales and other financial data to assess the effectiveness of its asset disposition strategies.

RTC needs accurate and complete asset sales and financial information. With such information RTC would be able to better manage its inventory and better assess its asset disposition programs. Also, this information will be necessary to carry out the Secretary of the Treasury's request that RTC develop a comprehensive business plan that includes a strategy to maximize returns from the sale of its large inventory of hard-to-sell assets. As a result, we are recommending that RTC improve its methods for collecting and summarizing such information.

Background

Although RTC has sold a large volume of assets, it still has an enormous and difficult job ahead. According to RTC, as of March 31, 1993, it had recovered a total of \$321 billion in asset sales and collections. Its

¹RTC defines hard-to-sell assets as all real estate-owned; all loans except performing single-family mortgage loans; and other assets, such as equity participations and investments in subsidiaries.

remaining inventory had a book value of about \$91 billion, and RTC considers about 71 percent of these assets, by book value, to be hard to sell.

RTC's strategies to dispose of these assets include portfolio sales, securitization,² auctions, and individual sales that are generally performed by SAMDA contractors.³ RTC officials said that these sales efforts will enable RTC to reach small as well as large investors. A RTC official also said that without high-volume sales methods, such as portfolio sales and securitization, RTC would not be able to complete its asset disposition efforts by the statutory 1996 sunset date⁴ or to minimize asset holding and management costs.

RTC officials said the Hard-to-Sell Assets Review Project report was done because the (1) Thrift Depositor Protection Oversight Board was interested in RTC's disposition strategies for hard-to-sell assets and (2) former RTC President and Chief Executive Officer made the hard-to-sell assets sales strategy a top priority project in early 1992. According to the Hard-to-Sell Assets Review Project report, the purposes of the analysis were to (1) review the response of the marketplace to RTC's then current sales strategies, (2) identify issues that could affect RTC's efforts to dispose of hard-to-sell assets, and (3) analyze the net returns to RTC from selected sales strategies. The report concluded that RTC should continue to

- emphasize the sale of assets in portfolios rather than in individual asset transactions,
- design product packages that are tailored to all markets,
- sell products through both established and innovative sales strategies,
- emphasize the importance of early and thorough due diligence, and
- provide consistent and reliable postsettlement information for all sales strategies.

The report also concluded that the use of multiple RTC sales strategies had attracted a large number of different buyers and that increased competition for RTC assets had resulted in better overall returns.

²Securitization is the process of assembling assets with similar characteristics into pools that are used as collateral for newly issued securities. Cash flow from the asset pools is used to pay interest and principal on the securities.

³RTC contracts extensively with the private sector to manage and dispose of its billions of dollars in assets from failed thrifts. SAMDA is one of RTC's principal types of contract. The contractors' duties are to assume responsibility for a pool of assets, prepare a business plan for their management and disposition, provide asset management services, and sell assets.

⁴RTC is required by law to cease operations by December 31, 1996.

Objective, Scope, and Methodology

Our objective was to assess the validity of RTC's statistical analysis in the Hard-to-Sell Assets Review Project report. To meet our objective, we analyzed RTC's methodology and determined what data were used in the statistical analysis. We gathered and reviewed applicable descriptive statistics and supporting data used by RTC for SAMDA, portfolio, and auction sales. We also interviewed senior RTC headquarters officials in RTC's Division of Asset Management and Sales and the Office of Research and Statistics (ORS). During the interviews, we discussed how RTC had conducted the analysis and what implications the officials believed the analysis had for RTC's disposition activities.

We did our work from December 1992 through June 1993 in accordance with generally accepted government auditing standards.

Approach and Methods Used in Recovery Analysis Were Appropriate

As part of RTC's Hard-to-Sell Assets Review Project report, ORS conducted a statistical analysis of the net recoveries from various sales strategies. This analysis, entitled Hard-to-Sell Assets Study - A Comparison of RTC Sales Strategies, was issued November 1992. The objective of the analysis was to compare RTC's net recoveries on hard-to-sell assets sold through three sales strategies by analyzing gross and net recoveries, holding periods, and direct and indirect costs. The analysis stated that RTC should have a clear understanding of the historical effectiveness of its sales methods.

The analysis compared the actual gross and net recoveries from portfolio and auction sales with the projected SAMDA gross and net recoveries for similar assets. Portfolio sales were not compared to auction sales because of differences in the type and size of assets included in each sale method. The majority of the portfolio sales included in the analysis involved loans, and all of the auction sales included in the analysis involved real estate-owned (REO) assets. RTC used March 31, 1992, as the cutoff date for collecting data to be used in its analysis.

To estimate the SAMDA recoveries, RTC used actual SAMDA sales data in a regression analysis⁵ to determine the relationship between asset sales prices and asset characteristics. According to RTC, estimates made on the basis of SAMDA sales data could suffer from a selection bias⁶ since SAMDA contractors may have had a financial incentive to sell assets with a high

⁵Regression analysis is a method used to determine the association between a dependent variable and one or more independent variables.

⁶Selection bias refers to a factor that causes an estimate made on the basis of a sample to differ systematically from the population parameter being estimated.

return early in their contracts. RTC used an estimation methodology that could, with the appropriate data, detect and control for such selection bias.

The estimated relationship between asset sales prices and asset characteristics was then used to project gross recoveries for portfolio and auction assets as if the assets had been sold instead by SAMDA contractors. To determine net recoveries, RTC estimated the holding period and holding cost for each asset type as if it were sold by SAMDA contractors using survival analysis⁷ and estimated the sales expenses associated with each strategy. RTC determined projected net recoveries by deducting these holding costs and sales expenses from gross recoveries and adjusting them for holding periods. These projected net recoveries were then compared to the actual net recoveries of portfolio and auction sales. We reviewed RTC's analytic methods and determined that they were appropriate for this type of analysis.

Data Limitations Hindered Analysis

Although RTC personnel used appropriate analytic methods, the results from RTC's statistical analysis are questionable primarily because they are based on incomplete and inaccurate asset sales and financial data. RTC's analysis concluded that gross recoveries from portfolio sales and auctions are about the same as gross recoveries from SAMDA contractors. The analysis further concluded that, on the basis of net recoveries, the use of portfolio and auction sales is generally as effective for selling REO and more effective for selling nonperforming loans than asset sales by SAMDA contractors.

In addition, the analysis stated that RTC should not sell all of its assets through a single sales strategy because (1) the sales strategies have been designed in part on the basis of the types of assets being sold and (2) if all of the assets were shifted into portfolio sales and auctions, the sales prices and holding periods associated with these strategies may change. Table 1 presents the results of the analysis and compares RTC's actual gross and net recoveries for portfolio and auction sales with the projected SAMDA gross and net recoveries for similar assets.

⁷Survival analysis, in the context of this study, is a technique for estimating asset holding periods when all of the assets in the inventory pool have not been sold.

Table 1: RTC's Comparison of Recoveries by Sales Methods

Asset type	Sales method	Gross recovery as a percentage of book value	Net recovery as a percentage of book value
Primarily nonperforming and subperforming loans, some REO	Portfolio sales (actual)	48	37
	SAMDA sales (projected) ^a	46-50	5-21
REO land	Outcry Auction (actual)	36	20
	SAMDA sales (projected) ^a	22-44	1-23
REO commercial	Outcry auction (actual)	70	47
	SAMDA sales (projected) ^a	31-73	3-45
REO commercial	Sealed bid auction (actual)	53	39
	SAMDA sales (projected) ^a	33-69	5-41

^aFor projected SAMDA sales, RTC used a 95-percent confidence interval, which means that in 95 of 100 instances the sampling procedure used would produce a range of estimates containing the population value being estimated.

Source: RTC's Hard-to-Sell Assets Study - A Comparison of RTC Sales Strategies (November 1992).

Table 1 shows, for example, that nonperforming loans sold in a portfolio sale yielded a net recovery of 37 percent of book value (gross sales price minus direct holding expenses and RTC indirect holding costs). RTC estimated that if these same loans were sold by a SAMDA contractor, the net recovery would have been 5 percent to 21 percent of book value. In another example, REO land sold by outcry auction yielded 20 percent of book value; and RTC estimated that if this land had been sold by a SAMDA contractor, the recoveries would have ranged from 1 percent to 23 percent of book value.

Many factors such as undercounted loans by sales method, unavailable net operating income and other financial data, limited portfolio and auction sales data, and inaccurate data on holding periods impaired the analysis. The data used to project recoveries from SAMDA loan sales were incomplete. The analysis stated that, at the time RTC collected the data, only a portion of the SAMDA contractors used the Asset Manager System

(AMS),⁸ and as a result, more loans may have been sold than the AMS data indicated. Also, at the time RTC collected the data, neither the Real Estate-Owned Management System (REOMS)⁹ nor AMS accurately identified the sales methods for disposing of assets. Therefore, assets originally placed with SAMDA contractors but subsequently withdrawn and sold through a RTC auction or portfolio sale could have been incorrectly credited to SAMDA contractors. These data problems could have distorted the actual and projected net returns in the analysis, and therefore, the projected recoveries may not be accurate.

Furthermore, the RTC analysis noted that SAMDA contractors were generally trying to restructure nonperforming loans, rather than pursue a foreclosure and sales strategy. As a result, there were fewer SAMDA loan sales and extremely long holding periods. However, RTC was unable to control for this important difference in the treatment of nonperforming loans. The RTC analysis did caution that because SAMDA contractors were generally employing a restructuring strategy, final conclusions could not be reached until the assets had been under management for a number of years and the results of the restructuring strategy could be assessed.

RTC tried to identify factors that could be used to project recovery values, but its information systems did not capture all of the needed data. RTC used factors such as occupancy rate and square footage. It did not use other important factors such as net operating income for income producing real estate assets to project recovery values. Further, the analysis also explained that other asset data, such as loan payment history, operating income and expenses, and litigation and foreclosure expenses, were not available for portfolio and auction assets. Therefore, these factors were also excluded from the analysis.

The analysis also described limitations with the portfolio sales data. These data were limited to seven large transactions completed by the RTC National Sales Center. The analysis stated that a substantial amount of data from smaller portfolio sales conducted by headquarters and field offices were not used. As we recently reported, RTC did not collect consistent and comprehensive information about loan portfolio sales.¹⁰ Although RTC field offices and the National Sales Center prepared reports on loan portfolio sales results, the types and amounts of information

⁸AMS is a RTC system used to maintain receipt and disbursement information on assets under asset management agreements.

⁹REOMS is a system used to maintain an inventory of RTC-owned real estate.

¹⁰RTC: Loan Portfolio Pricing and Sales Process Could Be Improved (GAO/GGD-93-116, July 23, 1993).

shown in these reports varied greatly. These reports were not summarized RTC-wide, and therefore, overall results on loan portfolio sales were not available for analysis and evaluation.

Also, RTC acknowledged in its analysis that the reliability of estimated SAMDA holding periods was questionable because (1) AMS data did not reflect all loan sales and (2) SAMDA contractors may sell assets at a much faster pace in the last year of their contracts to earn disposition fees before their contracts expire. Either of these factors could affect the projected holding period for SAMDA assets. Inaccurate holding periods could invalidate the conclusion that net recoveries for portfolio sales and some auction sales are higher than for SAMDA sales.

RTC's analysis compared the net recoveries from portfolio and auction sales to individual sales by SAMDA contractor to dispose of similar assets. As the analysis states, RTC did not control for important factors that could have made a difference in the results. For example, certain loan characteristics, such as the underlying collateral, financial condition of the borrower, and payment histories, could not be obtained from AMS. Therefore, the RTC analysis did not control for any possible differences between the types and quality of loans sold in portfolio sales and by SAMDA contractors.

The analysis stated that because of time constraints and difficulty in collecting auction information from the field offices, the original auction sample was not complete. As a result, the outcry auction REO sales mostly consisted of assets located in Georgia. These sales were compared to SAMDA REO nationwide sales even though the assets located in Georgia made up about 60 percent of the sample for outcry auctions but only 3 percent of the SAMDA sales sample. Since the analysis did not control for location, we could not determine whether any resulting difference in net recoveries was due to sales strategy or asset location.

Future Studies

RTC officials stated that there were no plans to repeat this analysis. However, during testimony on March 16, 1993, the Secretary of the Treasury stated that RTC would begin several management reforms. One of these reforms directed RTC to prepare a comprehensive business plan with an objective to maximize returns from its remaining assets. Another reform directed RTC to improve management information systems by enhancing information systems to adequately support business needs; improving data accuracy, completeness, and timeliness; and improving

management information to support fact-based corporate decisionmaking. As of July 1993, plans were under way to implement these reforms.

Conclusions

The results from RTC's recovery analysis were impaired because of data limitations. Without consistent and comprehensive asset sales and financial data, RTC cannot accurately measure the results of its sales strategies.

RTC must improve its methods for collecting and summarizing asset sales and financial data to maximize recoveries on its hard-to-sell assets. If RTC had accurate information on asset characteristics, revenues, expenses, holding periods, gross and net proceeds, and sales methods by asset type, it could more effectively manage its disposition program and evaluate the results of its various sales methods. Furthermore, such data will be necessary to carry out the Secretary of the Treasury's request that RTC develop a comprehensive business plan that includes a strategy to maximize returns from the sale of its inventory of hard-to-sell assets.

Recommendation

We recommend that in implementing the Secretary of the Treasury's management reform to improve management information systems, the President and Chief Executive Officer of RTC should improve RTC's methods for collecting and summarizing asset sales and financial data. These data are needed to help RTC better manage its asset inventory and to ensure that its asset disposition strategies maximize recoveries.

Agency Comments

RTC provided written comments on a draft of this report (see app. I). RTC did not disagree with any of our findings. In response to our recommendation that RTC improve its data collection methods, RTC discussed improvements made to several of its information systems. RTC stated that sales and financial information, which was not available when the Hard-to-Sell Assets Review Project report was done, is now being collected. RTC also noted that while such data are gathered on a portfolio, pool, and bid basis they are not yet available for individual assets. Further, RTC stated that information on holding costs and holding periods is still not available, but an analysis is under way to determine the most effective manner to assess the impact of holding costs and periods.

Although we have not had an opportunity to examine these system improvements, we are pleased that RTC is taking steps to improve its assets

sales and financial data. These efforts should enable RTC to more effectively carry out its disposition programs and help to maximize the value of its assets.

As agreed with you, unless you publicly release its contents earlier, we plan no further distribution of this report until 21 days from the date of this letter. At that time, we will send copies of this report to other interested congressional members and committees, the Chairman of the Thrift Depositor Protection Oversight Board, and the President and Chief Executive Officer of RTC. We will also make copies available to others upon request.

The major contributors to this report are listed in appendix II. Please contact me on (202) 736-0479 if you or your staff have any questions.

Sincerely yours,



Gaston L. Gianni, Jr.
Associate Director, Government
Business Operations Issues

Comments From the Resolution Trust Corporation



RESOLUTION TRUST CORPORATION
Resolving The Crisis
Restoring The Confidence

August 25, 1993

Johnny C. Finch
Assistant Comptroller General
United States General Accounting Office
General Government Division
Washington, DC 20548

Re: Draft Report - Data Limitations Impaired
Analysis of Sales Methods

Dear Mr. Finch:

Thank you for the opportunity to review and comment on the subject draft report.

The Resolution Trust Corporation is pleased that the Government Accounting Office validated the approach taken in preparing our Hard-to-Sell Asset Review Project report, issued December 1, 1992. We also agree that our report would have been enhanced had the information concerning sales been more detailed and consistently available for analysis. In fact, as noted in that report, RTC acknowledged reliability issues related to certain data used to prepare the analysis. Subsequently, RTC has undertaken several steps to improve data quality in its systems and to expand the comprehensiveness of the sales data we collect. These steps are discussed below.

A. Data Collection and Summarization Improved

Sales and financial data which was not available when the Hard-to-Sell Asset Review Project was performed is now available through the Mega-Portfolio Tracking System ("MegaPorts"). This is a new system, created in late 1992, which was specifically designed to track portfolio sales of loans and real estate. It also tracks auctions of loans and large value REO.

MegaPorts tracks information about sales on a portfolio, pool, and bid basis. It also collects the costs and fees associated with each particular sales initiative. (The system currently tracks financial advisor fees and due diligence costs. Additional enhancements are underway to include legal and title costs. These costs are currently available on a LOTUS database and will be input into MegaPorts when the system enhancements are completed.) Please see B., below, for a more detailed description of the MegaPorts system.

801 17th Street, N.W. Washington, D.C. 20434

Appendix I
Comments From the Resolution Trust
Corporation

GAO Draft Report
Resolution Trust Corporation: Data Limitations Impaired Analysis of Sales Methods
August 25, 1993

Page 2

Details on Securitization and the N-Series/S-Series are manually tracked in Capital Markets. The information is updated whenever a securitization issue is sold. The two reports which track securitization initiatives are the "Summary of RTC Securitization Transactions", which describes the transaction and lists the contractors involved, and the "Securitization Versus Whole Loan Report", which shows the net recovery after direct costs and compares the securitization to a projected whole loan sale.

The detailed sales information, now routinely collected, assists in performing in-depth analysis of disposition strategies for various asset types. An in-depth analysis of disposition strategies using the discussed information was performed as part of the Asset Disposition Business Plan (to be issued shortly). Furthermore, as part of the Business Plan, RTC is committed to looking at its disposition programs on an on-going basis to insure that the value of our assets is maximized.

B. Implementation of the Mega-Portfolio Tracking System

RTC collects consistent and comprehensive information about loan portfolio sales through the MegaPorts system, which was created in late 1992. (The system also tracks portfolio sales of REO and auctions of loans and large REO.) In order to efficiently track the appropriate sales initiatives, all sales advertised in the RTC Calendar of Events published in the Wall Street Journal are entered into MegaPorts.

MegaPorts tracks sales initiatives by collecting information about sales on a portfolio, pool, and bid basis together with the costs and fees associated with each particular sales initiative. While the system emphasizes tracking of portfolio sales, information about certain equity partnership programs (such as the Land Fund), auctions and certain other large book value asset dispositions is also collected.

MegaPorts data is compiled on an aggregate basis; the smallest unit of information is at the pool level. Data include pool characteristics, estimated market value, asset quality, bidders and bids. Enhancements are being made so the information about specific assets will be able to be generated through the 12-digit uniform identifier code which correlates data compiled in MegaPorts to other RTC systems including, but not limited to, REOMS, CLD/CLDS, AMS, and SIMAN.

C. Additional Efforts Underway

Information about gross sales price, expenses and net revenues can be tracked for the various disposition methods through database systems and standard reports from such systems as MegaPorts, REOMS, and CLD/CLDS. This information, which is now consistently tracked, allowed an in-depth analysis of net recovery rates to be performed as part of the Asset Disposition Business Plan.

Appendix I
Comments From the Resolution Trust
Corporation

GAO Draft Report
Resolution Trust Corporation: Data Limitations Impaired Analysis of Sales Methods
August 25, 1993

Page 3

Throughout 1993, the RTC has been involved in a major effort to verify, correct and maintain high levels of data quality in REOMS and AMS. These efforts also address historical information, where it was cost-effective to do so. For example, as SAMDA contracts are prepared for using the Automated Clearing House function of AMS, historical data, including sales information, must be recorded in AMS.

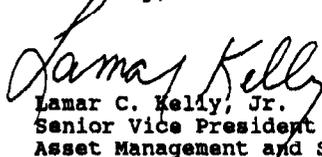
Increased focus on resolving data quality problems in the CLD/CLDS system (used to manage the RTC's loan inventory) and in SIMAN (the subsidiary asset inventory system) have also begun to yield positive results. Further, a corporate initiative to establish and maintain data quality standards for all major systems is being developed under the auspices of the RTC's Information Resources Management Steering Committee.

RTC's information and reporting systems still do not readily provide information on holding costs and holding periods. An analysis is underway to determine the most effective manner to assess the impact of holding costs and holding periods. The results of this analysis should be available during the fourth quarter of 1993. Systems modifications to accommodate this information must be carefully weighed against the cost of their development and the timeline for their possible implementation. Alternatives to full-fledged systems enhancements such as PC-based models may be more cost-effective.

RTC is pleased with its progress to date and continues its efforts to enhance data quality throughout its management information systems.

If you have any questions concerning this response to your draft report, please contact Vicki Peterson, Director-Office Case Management and Program Compliance at (202) 416-7366 or James Crum, Director-Office of Systems Management at (202) 416-4081.

Sincerely,


Lamar C. Kelly, Jr.
Senior Vice President for
Asset Management and Sales

Major Contributors to This Report

General Government
Division, Washington,
D.C.

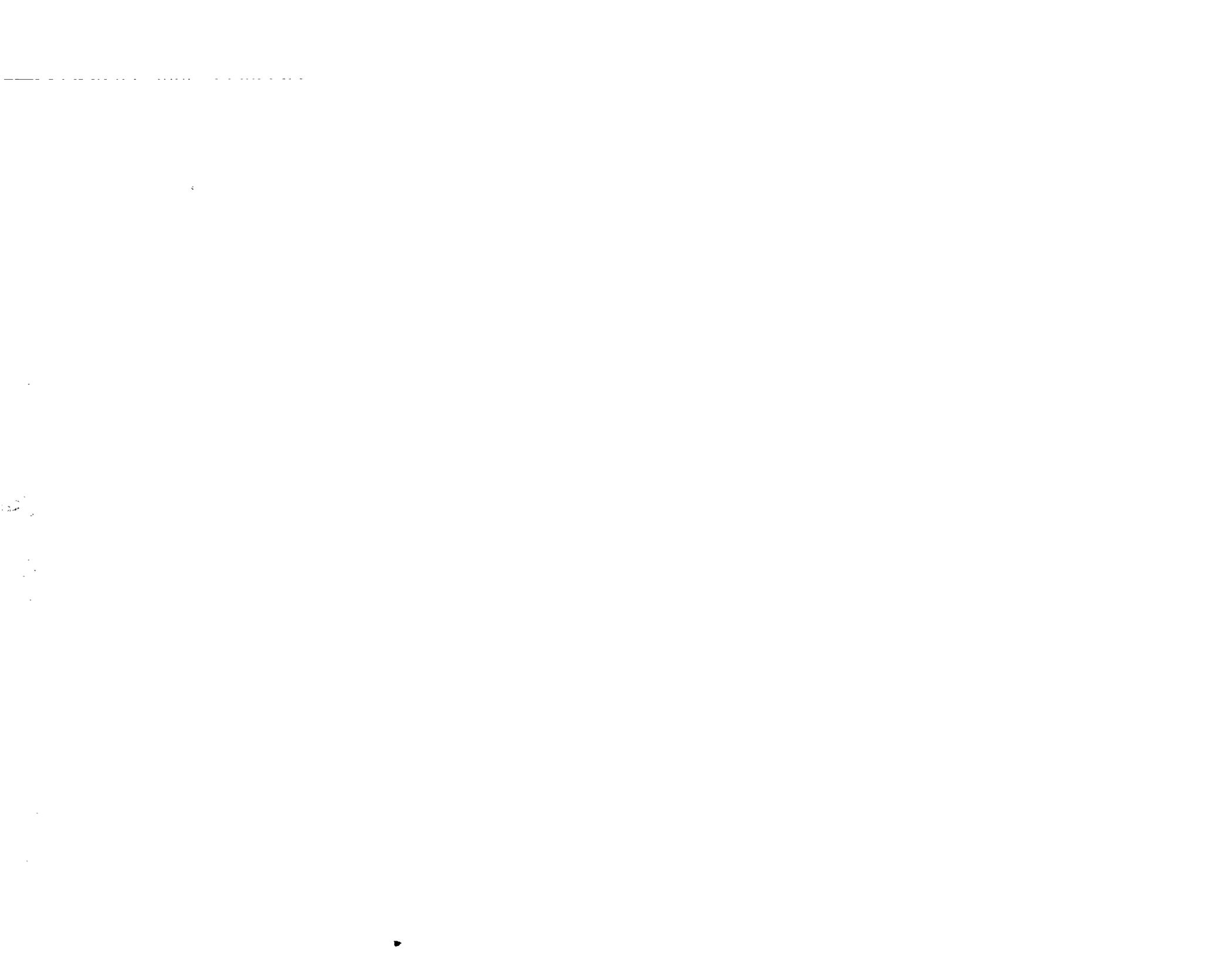
Carolyn M. Taylor, Assistant Director, Government Business
Operations Issues
Eugene M. Smith, Program Review Analyst
Philip J. Mistretta, Senior Evaluator
Abiud Amaro, Evaluator
Douglas M. Sloane, Assistant Director, Design, Methodology, and
Technical Assistance Group
Arthur J. Kendall, Senior Mathematical Statistician

Office of the Chief
Economist,
Washington, D.C.

James R. White, Economist

Kansas City Regional
Office

Jerry W. Pennington, Evaluator-in-Charge
Marshall S. Picow, Evaluator



Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

**U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015**

or visit:

**Room 1000
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC**

**Orders may also be placed by calling (202) 512-6000
or by using fax number (301) 258-4066.**

United States
General Accounting Office
Washington, D.C. 20548

Official Business
Penalty for Private Use \$300

First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100

1