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Report to the Ranking Minority Member, Subcommittee on Housing and Transportation, Committee on Banking, Housing, and Urban Affairs, U.S. Senate

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SINGLE-FAMILY HOUSING

Current Information Systems Do Not Fully Support the Business Processes at HUD's Homeownership Centers

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Contents

Abbreviations

ARRTS	Approval/Recertification/Review Tracking System
CHUMS	Computerized Homes Underwriting Management System
FHA	Federal Housing Administration
FHAC	FHA Connection
HUD	Department of Housing and Urban Development
NW	Neighborhood Watch
OMB	Office of Management and Budget
SAMS	Single Family Acquired Asset Management System
SFDW	Single Family Data Warehouse
SFIS	Single Family Insurance System
URS	Underwriting Reports System

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United States General Accounting Office
Washington, DC 20548

October 24, 2001

The Honorable Wayne Allard
Ranking Minority Member, Subcommittee
on Housing and Transportation
Committee on Banking, Housing,
and Urban Affairs
United States Senate

Dear Senator Allard:

The Department of Housing and Urban Development's (HUD) Federal Housing Administration (FHA) relies on more than 20 different information systems as it annually insures billions of dollars in home mortgage loans made by private lenders. FHA's mission is to expand homeownership in the United States by assuming 100 percent of the risk for mortgages it insures. To carry out its mission, FHA relies on private lenders to determine borrowers' creditworthiness and to make and fund loans. FHA also relies on contractors to help assess lenders' compliance with its requirements and to manage and sell the properties it acquires through foreclosure. Without careful oversight of these lenders and contractors, FHA is vulnerable to mismanagement and fraud. The information systems FHA uses to collect and analyze data on FHA-insured loans and foreclosed properties are crucial to its oversight activities. However, the White House's fiscal year 2002 budget blueprint stated that inadequate information systems have weakened FHA's ability to monitor lenders. FHA's information and telephone systems are also essential to its efforts to provide customer service to lenders, borrowers, and the general public.

In 1997, HUD issued its 2020 Management Reform Plan, which provided for downsizing and reforming the Department, including its single-family mortgage insurance program. As part of its 2020 reforms, HUD consolidated the single-family program's field activities from 81 field offices to 4 new regional homeownership centers. This consolidation significantly altered the way FHA's single-family program operated. One affected area was information systems, which had been established to support the old field office structure and had to be adapted to support the operations of the new homeownership centers.

This is the second of two reports responding to your request that we review HUD's implementation of the homeownership center concept. The

first, issued in July 2001, discussed HUD's efforts to resolve human capital issues related to staffing, training, and oversight of contractors at the homeownership centers.[1] This report focuses on the single-family information systems used at the centers. Specifically, as agreed with your office, we (1) describe the information systems used by the homeownership centers, (2) analyze the effectiveness of these systems in supporting the centers' current operations, and (3) assess HUD's plans for the information systems used by the centers.

To address these issues, we interviewed officials at HUD headquarters and managers and information system users at all four of the Department's homeownership centers, located in Atlanta, Georgia; Denver, Colorado; Philadelphia, Pennsylvania; and Santa Ana, California. We also collected and analyzed documents related to FHA's single-family information systems, FHA's single-family business processes, and HUD's plans for FHA's single-family information systems. Appendix I provides additional details on our scope and methodology.

Results in Brief

To oversee the work of lenders and contractors and provide customer service, FHA's homeownership centers use more than 20 different information systems implemented by HUD headquarters, including 7 major systems; databases developed by the centers; and a variety of different telephone systems. Some of these technologies were implemented before FHA revised its single-family business practices by forming the centers and transferring some responsibilities to lenders and contractors. Others were implemented afterward, in large part to help FHA staff focus more on overseeing lenders and contractors and on providing customer service. For example, one of the seven major information systems the centers use, the Computerized Homes Underwriting Management System (CHUMS), was implemented in 1985 for FHA staff to track their processing of single-family mortgage insurance applications from receipt to approval. After FHA delegated many of these responsibilities to lenders, HUD implemented another major information system, the FHA Connection, to give lenders access to the information from CHUMS and other FHA systems that the lenders need to originate and service loans. Furthermore, as the centers have increased their reliance on contractors, they have developed databases to help them monitor contractors' performance. To

[1] *Single-Family Housing: Better Strategic Human Capital Management Needed at HUD's Homeownership Centers* (GAO-01-590, July 26, 2001).

provide customer service, the centers have acquired a variety of different telephone systems—systems that distribute telephone calls and generate management reports on workload.

Although homeownership center staff have developed specialized databases to improve their ability to meet their responsibilities, neither FHA's single-family information systems nor its telephone systems adequately support the centers' efforts to oversee lenders and contractors and provide customer service. For example:

- Effective oversight of lenders is critical to minimizing FHA's insurance risk, yet center staff must collect information from many different sources to target high-risk lenders for review and to identify and investigate potential fraud cases. This creates a greater risk of error and increases the likelihood that problems will go unnoticed.
- FHA's single-family information systems do not readily provide information that the centers need to monitor contractors who are paid millions of dollars to manage and sell the single-family properties HUD acquires when borrowers default on loans. For example, the centers' systems do not generate reports needed to monitor these contractors' sale of properties under two special programs that allow police officers and teachers to purchase at a discount HUD-owned homes located in certain neighborhoods. HUD's Inspector General identified evidence of potential fraud in these programs, causing HUD to suspend the programs for 120 days.
- The telephone systems at two of the four centers do not provide the detailed information, such as total call volume and peak usage periods, that staff need to provide efficient customer service.

To better ensure that FHA's single-family information systems support current center operations, HUD is developing a systems blueprint, or enterprise architecture.[2] HUD's Office of the Chief Information Officer plans to finish defining the current capabilities of FHA's information systems by the fall of 2001 and to have partially defined the desired capabilities of all the Department's information systems by January 2002. Although HUD has made progress in developing an enterprise architecture, it has not yet put in place certain architecture management

[2]An enterprise architecture is an essential tool for effectively and efficiently reengineering business processes and for implementing and evolving their supporting systems. It defines an organization's current (baseline) and desired (target) systems operating environments and provides a road map for moving from one to the other.

controls recommended by the Chief Information Officers Council, including forming an executive steering committee to oversee the enterprise architecture. Concurrent with the development of an enterprise architecture, HUD's Office of Single Family Housing has developed plans to replace four systems that currently support the origination of FHA-insured loans with one system that has greater capabilities. Prior to laying the groundwork for a new loan origination system, the Office of Single Family Housing did not assess the current loan origination processes in place at the centers. It decided in August 2001, however, to delay acquisition of the new system until after it has reviewed the entire loan origination process. Since HUD has not yet completed its enterprise architecture or examined its single-family operations, it is too soon to assess whether these efforts will fully address the centers' information system needs.

Given the multibillion-dollar insurance risk that FHA assumes annually, it is critical that the agency's information and telephone systems help it carry out its responsibilities efficiently and effectively. However, the information and telephone systems in use at FHA's four homeownership centers do not support current business processes. Although center staff have developed methods to cope with the systems' weaknesses (often by performing time-consuming, manual analyses), problems with the current information and telephone systems make it difficult for the staff to oversee lenders and contractors and provide timely and consistent customer support. This report contains recommendations designed to improve the usefulness of the centers' information and telephone systems. HUD did not take issue with any of our findings or factual statements and only expressed concerns about one of our recommendations.

Background

HUD's homeownership centers support the single-family activities of FHA.[3] FHA insures lenders against losses on mortgages for single-family homes. Lenders usually require mortgage insurance when a homebuyer makes a down payment of less than 20 percent of the value of the home. Thus, FHA plays a particularly large role in certain market segments, including loans to low-income borrowers and first-time homebuyers, whose cash for down payments is likely to be limited. During fiscal year 2000 alone, FHA endorsed more than 900,000 mortgages totaling about $94

[3]FHA is a unit within HUD, and the Assistant Secretary for Housing is also the Federal Housing Commissioner.

billion. As of June 2001, the total value of HUD's single-family insured portfolio was almost $498 billion. If a borrower defaults and the lender subsequently forecloses on an FHA-insured mortgage, the lender can file an insurance claim with FHA for the unpaid balance of the loan. When FHA reimburses a lender for a defaulted loan, HUD receives the deed to the foreclosed property. HUD, in turn, sells this property via one of its management and marketing contractors to recoup as much of FHA's reimbursement costs as possible.

In the past, HUD carried out its single-family activities—such as processing mortgage insurance and overseeing lenders participating in FHA's programs—in 81 separate field offices. As part of its 2020 Management Reform Plan announced in 1997, HUD consolidated the single-family housing activities of its 81 field offices at 4 homeownership centers. According to the 2020 plan, the homeownership centers would, among other things, (1) improve service to lenders through automated systems; (2) provide faster, more uniform, and more efficient services to lenders, borrowers, and industry clients; and (3) improve HUD's risk assessment, loss mitigation,[4] and quality assurance activities.

The consolidation of activities at the four centers was carried out in phases and was substantially completed in December 1998. The homeownership centers are located in Atlanta, Georgia; Denver, Colorado; Philadelphia, Pennsylvania; and Santa Ana, California, and they report directly to HUD's Deputy Assistant Secretary for Single Family Housing. They perform a variety of activities that fall within three basic functions:

- Lender oversight—Many activities formerly performed by FHA staff have been delegated to lenders, increasing the importance of the centers' oversight of lenders' performance. The centers are responsible for granting direct endorsement authority to lenders participating in FHA programs.[5] Before granting lenders direct endorsement authority, the centers evaluate mortgages that the lenders have submitted as test cases using FHA's underwriting requirements. To ensure lenders' continued compliance with FHA's mortgage requirements, the centers use two monitoring tools: (1) desk audits of the underwriting quality of individual loans already insured

[4]FHA's loss mitigation program seeks, among other things, to reduce the number of foreclosures by using alternatives to foreclosure, such as loan modifications.

[5]Direct endorsement authority is the ability to underwrite loans and determine their eligibility for FHA mortgage insurance without HUD's prior review.

by FHA, known as technical reviews, and (2) on-site evaluations of lenders' operations, known as lender reviews.

- Contractor oversight—As many activities formerly performed by FHA staff have been transferred to contractors, the centers have become responsible for overseeing contractors' performance. For instance, the centers monitor contractors hired to review loan case files and issue mortgage insurance certificates. The centers also oversee contractors hired to manage and market acquired single-family properties, inspect 10 percent of the properties handled by each of the management and marketing contractors, and review 10 percent of the management and marketing contractors' property case files each month.
- Customer service—Each center has designated customer service staff who respond to requests from the general public (for basic information on HUD and FHA programs) and industry clients (for support on FHA programs, services, and information systems). Designated program staff also provide more advanced customer service, responding to technical questions on loan underwriting and property disposition. In total, the centers average almost 90,000 telephone calls a month.

HUD recognized that its decision to consolidate FHA's single-family field activities at four homeownership centers would dramatically change its business processes and require changes to its single-family information systems. In its April 1998 assessment of the homeownership centers' susceptibility to waste, fraud, abuse, and mismanagement, HUD noted the proliferation of financial management systems within the Department and the need to replace them with an integrated, state-of-the-art system.[6] It also observed that two major single-family information systems would have to be modified to reflect the new business processes at the centers. Despite this recognition, FHA's failure to enhance its information technology systems to support its business processes more effectively was cited as a material weakness in the HUD Inspector General's last three reports on FHA's financial statements.[7] For example, according to the Inspector General's report on FHA's fiscal year 2000 financial statements, FHA's inability to acquire more modern information technology has deterred its

[6]*Single Family Homeownership Centers Front End Risk Assessment*, Office of Single Family Housing, Apr. 27, 1998.

[7]HUD's Inspector General contracts with independent public accountants to audit FHA's financial statements.

efforts to be a more efficient and effective housing credit provider.[8] Also according to the report, FHA will be forced to use less efficient processes to collect and report on data until a comprehensive new integrated information technology environment is implemented.

A best practice used in the public and private sectors to improve existing information systems and develop new ones efficiently and effectively is the development, maintenance, and implementation of an enterprise architecture, also known as an information technology architecture.[9] The Clinger-Cohen Act requires agency chief information officers to develop, maintain, and facilitate the implementation of sound and integrated information technology architectures.[10] An agency's architecture should be an integrated framework for evolving or maintaining existing information technology and acquiring new technology to achieve the agency's strategic and information resource management goals and better support its business needs. According to the Office of Management and Budget (OMB), to develop an enterprise architecture, an agency should identify and document its business processes,[11] information flows and relationships, applications, data descriptions and relationships, and technology infrastructure. OMB has also issued guidance that requires an agency's information systems investments to be consistent with its architecture. In addition, the federal Chief Information Officers Council, in collaboration with us and OMB, has published a framework that defines effective architecture management controls that successful organizations practice.[12]

[8]*Audit of the Federal Housing Administration's Fiscal Year 2000 Financial Statements* (2001-FO-0002, Mar. 1, 2001).

[9]An enterprise architecture provides a comprehensive blueprint that systematically details the breadth and depth of an organization's mission-based mode of operation. Such an architecture provides details first in logical terms, such as defining business functions, providing high-level descriptions of information systems and their interrelationships, and specifying information flows; and second in technical terms, such as specifying hardware, software, data, communications, security, and performance characteristics.

[10]Public Law 104-106, section 5125, 110 Stat. 684 (1996).

[11]Enterprise architectures should contain a business process component that describes the core business processes supporting the organization's mission. The business process component of the architecture must be developed by senior program managers in conjunction with information technology managers.

[12]Chief Information Officers Council, *A Practical Guide to Federal Enterprise Architecture*, *Version 1.0* (February 2001).

Homeownership Centers Use Numerous Systems to Support Their Operations

While more than 20 different information systems support single-family operations, the homeownership centers currently rely on 7 major information systems to oversee lenders and contractors and provide customer service. These seven information systems are a combination of older systems acquired to support business processes in place before the centers were formed and newer systems implemented to better support current center operations and improve the usefulness of the older systems. In addition to these major systems, the centers have developed specialized databases to help them fulfill their missions. Also, each of the four centers uses a different telephone system to distribute calls and track workload data.

Systems Used Are a Combination of Major Systems and Less Complex Databases Developed to Address Gaps

The seven major information systems the centers use are a combination of legacy systems and newer systems implemented to make better use of these legacy systems and to better support the centers' current operations.[13] Information on the seven systems is shown in table 1.

[13]A legacy system is an old system with which new technology must be compatible.

Table 1: Seven Major Single-Family Information Systems Used at HUD's Homeownership Centers

Information system	Acronym	Purpose	Types of uses	Year implemented
Single Family Insurance System	SFIS	Contains detailed case information on all FHA-insured single-family properties	Used to research the history of an FHA-insured loan	1983
Computerized Homes Underwriting Management System	CHUMS	Records the processing of single-family mortgage insurance applications, from initial receipt through endorsement	Used to process applications for FHA insurance	1985
Single Family Acquired Asset Management System	SAMS	Tracks acquired single-family properties from acquisition to sale	Used to manage properties acquired through foreclosure	1995
Approval/ Recertification/ Review Tracking System	ARRTS	Tracks the status of application and recertification packages received from lenders and reviews conducted of approved lenders	Used to approve and recertify lenders and to track reviews of lenders	1995
Single Family Data Warehouse[a]	SFDW	Provides critical single-family business data from eight single-family systems	Used to obtain case-level information covering all the processes in the mortgage insurance life cycle	1996
FHA Connection	FHAC	Gives approved FHA lenders real-time access to FHA systems	Used by lenders to originate and service loans	1997
Neighborhood Watch	NW	Displays loan performance data by loan types and geographic areas	Used to monitor lender default rates	1998

Note: Many other systems support single-family operations. They include the Institution Master File, which is a list of institutions that have been approved to participate in FHA's mortgage insurance programs, and the Consolidated Single Family Statistical System, which is HUD's comprehensive reporting system for the FHA single-family mortgage portfolio.

[a]HUD officials do not consider the Single Family Data Warehouse to be an information system in the traditional sense because it is a warehouse that pulls data from other information systems. We included it in the list of major information systems, however, because it is one of the major tools that the centers use to accomplish their functions.

Source: HUD data.

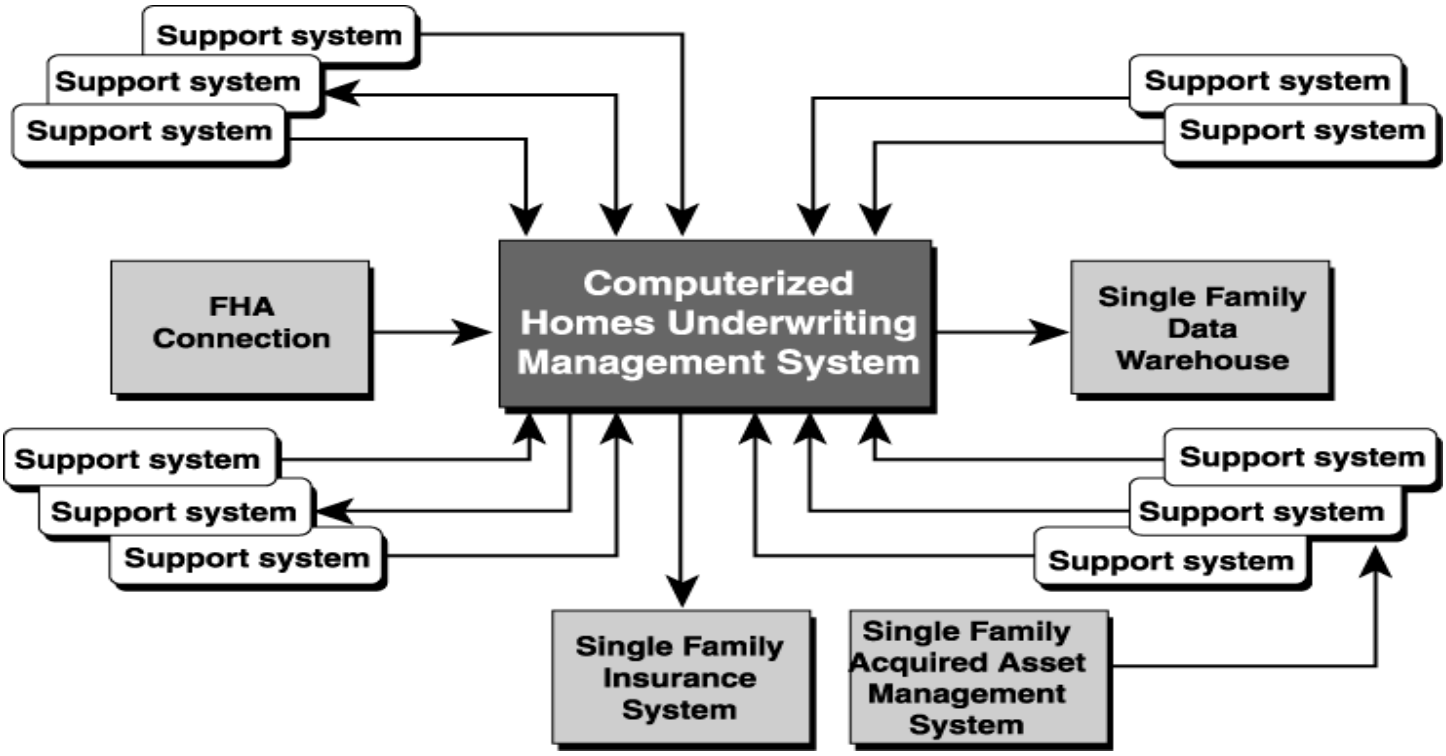
Of these seven systems, three are legacy systems that were implemented well before the homeownership centers were established—the Single Family Insurance System (SFIS), the Computerized Homes Underwriting Management System (CHUMS), and the Single Family Acquired Asset Management System (SAMS). Since these three legacy systems were implemented, FHA's single-family business processes have changed dramatically. For instance, when CHUMS was implemented, FHA staff were responsible for all aspects of FHA's mortgage insurance operations, such as evaluating and processing applications for mortgage insurance. Since then, FHA has increasingly delegated responsibility for the loan underwriting process to lenders, and FHA staff have assumed the role of verifying the underwriting process for completeness and compliance with

FHA policies and regulations.[14] Similarly, when SAMS was implemented, FHA staff were responsible for managing and selling properties acquired through foreclosure. Since the formation of the centers, the management and sale of these properties has been contracted out.

The four newer systems that the centers use were implemented to improve the usefulness of the legacy systems and better support the centers' current operations. HUD headquarters created the Single Family Data Warehouse to allow staff to query data from CHUMS, SAMS, and several other smaller legacy systems. Updated monthly, it provides historical case-level information that staff can use to complete trend analyses. As more responsibilities were delegated to lenders, headquarters created the FHA Connection to give lenders direct access to information in CHUMS and other FHA systems. Lenders can use the FHA Connection to request an FHA case number and assign an appraiser, among other things. Headquarters implemented the Approval/Recertification/Review Tracking System (ARRTS) and Neighborhood Watch to help FHA staff monitor lenders' performance. Figure 1 illustrates the number of information systems used to support just one aspect of the centers' operations, the origination of FHA-insured loans.

[14]Underwriting refers to a risk analysis that uses information collected during the origination process to decide whether to approve a loan.

Figure 1: Single-Family Information Systems That Support the Origination of FHA-Insured Loans



Note: The support systems perform a variety of functions not covered by the major systems, including providing information on the claim or default history of an individual, tracking insurance claims filed, and listing institutions that have been approved to participate in FHA's mortgage insurance programs.

Source: HUD's Office of Single Family Housing.

In addition to the information systems provided by HUD headquarters, staff at each of the four homeownership centers have developed databases, including spreadsheets, to help them perform tasks that the headquarters-provided systems do not effectively support. The Denver center has developed 15 databases and the Philadelphia center 10 databases to enhance their staffs' ability to track various program functions. One of these databases was designed to help FHA staff oversee contractors hired to perform desk audits of the underwriting quality of individual loans already insured by FHA, known as technical reviews. In our April 2000 report on lender oversight, we reported that the centers lacked the necessary information systems to readily identify and track the

technical review ratings of new direct endorsement lenders.[15] Since our report was issued, all four centers have implemented the Underwriting Reports System (URS), a Microsoft Access database developed by the Denver center that, among other things, tracks the performance of lenders with direct endorsement authority and the performance of the contractors hired to perform technical reviews. The centers have also started using the Inspection Tracking System, another Microsoft Access database developed by the Denver center, to monitor the performance of contractors hired to manage and market the properties HUD acquires through foreclosure. This system is used to assign cases to property inspectors hired to inspect 10 percent of the properties handled by each of the management and marketing contractors and to track the results of their inspections.

Different Telephone Systems Are Used to Provide Customer Service

Each homeownership center was responsible for acquiring its own telephone system to meet the center's communications needs and track workload data. As a result, each center uses a different system. These telephone systems distribute calls to customer service and program staff and track data on calls received. The centers use the reports that these systems generate to manage their customer service workload. For example, the Philadelphia center uses 10 reports to create management and performance charts that show, among other things, the total number of calls answered daily by the center in a given month and the average number of calls each individual answered per day in a given month. In addition, the Denver center uses weekly reports on abandoned calls and call activity to manage its workload. Each center provides headquarters with monthly data on the number and types of calls received.

Current Information and Telephone Systems Do Not Fully Support Center Operations

The willingness of the homeownership centers' staff to learn and use multiple information systems and develop specialized databases to meet their responsibilities demonstrates a commitment to accomplishing critical tasks. However, the information and telephone systems the centers use have not kept pace with changes in single-family business processes and workload. Therefore, these systems do not adequately support the centers' efforts to oversee lenders and contractors and provide customer service. Although the systems collect wide-ranging data on single-family

[15] *Single-Family Housing: Stronger Oversight of FHA Lenders Could Reduce HUD's Insurance Risk* (GAO/RCED-00-112, Apr. 28, 2000).

operations, center staff often must use multiple systems or manipulate the data in order to obtain the information needed to carry out their missions. For example, they must use data from multiple sources to identify high-risk lenders for monitoring reviews and identify and investigate potential fraud cases. Further, the information systems do not readily provide center staff with all the data they need to monitor contractor performance and manage contracting costs. Regarding customer service, inadequate telephone systems and the limited reporting capabilities of some information systems have made it difficult for center staff to provide service to both their external and internal customers.

High-Risk and Fraudulent Lenders Are Not Easily Identified

FHA's single-family information systems do not effectively help center staff target high-risk lenders for review or identify and investigate potential fraud cases—two activities integral to lowering insurance risk. In response to our recommendations, HUD recently incorporated risk factors when monitoring the performance of lenders. Center staff must now consider factors such as lenders' default rates and loan volume, borrowers' complaints, and reports of fraudulent activity when selecting lenders for review. However, they must go to multiple sources to obtain this information. As shown in table 2, the centers must compile data from three information systems and several nonautomated sources in order to develop the list of lenders to be reviewed each quarter. Although center staff are able to identify lenders for review using these multiple sources, center staff could logically save valuable time each quarter and be better assured that they are identifying the lenders of highest risk if this information were more integrated.

Table 2: Steps the Four Homeownership Centers Follow Each Quarter to Target Lenders for Monitoring Reviews

Step	Information source
Identify the 200 lenders in the center's jurisdiction with the highest default and claim rates and export the data to a spreadsheet	Neighborhood Watch
Add the following information about the 200 lenders to the spreadsheet:	
Date of last review to identify the lender branches that have been reviewed during the 18-month period prior to the beginning of the quarter	Neighborhood Watch
Percentage of overall "poor" ratings each lender received as a result of postendorsement technical reviews[a]	Neighborhood Watch
Information on any complaints, referrals, or documented evidence of irregularities related to the lender	ARRTS and various nonautomated sources
Add the following types of lenders to the spreadsheet:	
Lenders randomly selected from the universe of all FHA-approved lenders each fiscal year[b]	HUD headquarters
203(k) lenders targeted for review[c]	Neighborhood Watch
Title I lenders targeted for review[d]	Borrower complaints and referrals[e]
Note any lenders that have experienced a spike in volume—a 100 percent increase in origination volume over a 12-month period	CHUMS
Analyze the data and prioritize the lenders for review	

[a]Postendorsement technical reviews are desk audits performed to evaluate the underwriting quality of loans insured by FHA.

[b]No more than 15 percent of the lenders that a center reviews each year can be randomly chosen lenders.

[c]The 203(k) Home Rehabilitation Mortgage Insurance program combines, in one insured mortgage, the funds needed to purchase and rehabilitate a single-family home.

[d]The Title I mortgage insurance program insures loans used to finance property improvements or the purchase of manufactured homes.

[e]Staff must rely on borrower complaints and referrals, as well as other factors, to identify Title I lenders for review because there is no computerized monitoring of the Title I program in place.

Source: HUD's Office of Single Family Housing.

Not only do FHA's single-family information systems not facilitate the identification of high-risk lenders, they also do not help the centers identify predatory lending schemes before they become a major problem. Property flipping—buying a home at a low price and reselling it at an inflated price within a short time, often after making only cosmetic improvements—is one example of fraud in FHA loan origination activities. While property flipping is not always illegal, most known FHA cases involved fraudulent documentation provided by the lender and/or appraiser, which is illegal. The HUD Inspector General testified in June 2000 that these fraudulent property flipping activities could have been more quickly identified and the losses minimized had appropriate controls

been in place.[16] Similarly, according to the HUD Inspector General's report on FHA's fiscal year 2000 financial statements, FHA must continue to place more emphasis on early warning and loss prevention for single-family insured mortgages, including increasing its use and analysis of available data to monitor lenders.[17] Although the report states that FHA has improved its early warning and loss prevention processes, it notes that the Inspector General has still found a high risk of fraud concentrated in certain geographic areas.

FHA's single-family information systems also do not facilitate investigation of predatory lending schemes once they have been identified. To protect FHA borrowers from abusive mortgage practices such as illegal property flipping, HUD has designated certain low-income neighborhoods with higher-than-normal foreclosure rates as "hot zones." Under this new initiative, applications for FHA-insured loans in these hot zones, located in Atlanta, Baltimore, Chicago, Los Angeles, and New York, receive increased scrutiny. Because the centers' current information systems were not designed to support this new initiative, the centers had to develop the following manual procedures for identifying potential fraud cases and tracking the results of property flip checks:

- The centers have to perform up to three different searches to determine if properties for which FHA insurance has been requested have been flipped. Center staff search a commercial system containing property deed information, state and county web sites containing information on property transactions, and SAMS to determine if a property has been sold twice within 12 months, with the latest sales price exceeding the prior sales price by more than 30 percent. When searching each system or site, HUD staff must enter variations of the address (e.g., 135 N. Main, 135 North Main, and 135 N Main) to ensure a thorough search.
- Some of the reports the centers need to review hot zone cases have to be generated manually. For example, to create a list of properties to be checked in one hot zone, an Atlanta official has to pull two standard CHUMS reports—one listing cases by county and one listing cases by state—and merge them outside the system. Because it is not possible to extract information from ARRTS by zip code, a Santa Ana official must

[16]*Statement of Susan Gaffney, Inspector General, Department of Housing and Urban Development Before the United States Senate Permanent Subcommittee on Investigations, Committee on Governmental Affairs*, June 30, 2000.

[17]2001-FO-0002.

pull up information for the entire center, check each entry in the relevant state to determine if it is in one of the hot zone zip codes, and manually prepare a list.

- Once they have researched hot zone cases, the centers use a special database to track the results of their reviews. The Philadelphia center developed the Predatory Lending Monitoring System for use by all the centers to ensure that the results of their reviews in the designated hot zones are uniformly recorded. This system records case information and generates reports for HUD headquarters.

It is a credit to the centers' staff that they have developed these manual processes to investigate potential fraud. Automating all or part of these processes, however, might enable the homeownership centers to extend their flip checks beyond the five hot zones and prevent additional fraud.

Systems Do Not Totally Support Centers' Efforts to Assess Contractor Performance or Manage Contracting Costs

Although the centers have expanded their use of contractors, their information systems do not readily provide some of the performance data needed to monitor these contractors or the procurement and financial data needed to manage contract costs. For instance, center staff cannot always easily obtain the data they need to monitor endorsement contractors hired to review loan case files and issue mortgage insurance certificates. The Atlanta official responsible for overseeing these contractors has developed spreadsheets to help him use CHUMS data more effectively to gauge contractors' performance, but to obtain and analyze the data he must go through a multi-step process. He first transfers standard CHUMS hard-copy reports to a disk for analysis. He then creates spreadsheets that highlight weekly production trends, such as how many days it takes the contractor's staff, on average, to process mortgage insurance applications and how many errors the contractor's staff have made. He uses this information to determine where bottlenecks are occurring and whether the endorsement contractor is making the same mistakes repeatedly. This effort is commendable, but it could be avoided if the CHUMS system readily generated this information.

Center staff also cannot readily obtain and analyze data needed to monitor management and marketing contractors—contractors paid millions of dollars to manage and sell HUD's single-family acquired properties. The homeownership centers have a number of resources upon which they can draw to aid them in making monthly assessments of these contractors' performance. For instance, HUD hired third-party contractors to inspect 10 percent of the properties handled by each of the management and marketing contractors and to review 10 percent of the management and

marketing contractors' property case files each month by following a HUD checklist. The centers also use data from SAMS in making their monthly assessments. However, the following examples illustrate that very little of the data the centers receive is automated in a way that facilitates analysis:

- In fiscal years 1999 and 2000, the centers received the results of thousands of property inspections and reviews of property case files. However, a recent HUD Inspector General report on single-family property disposition activities at the Philadelphia center found that the results of these inspections and file reviews are not automated in a way that enables staff to use them effectively to monitor the performance of management and marketing contractors.[18] According to the report, deficiencies identified by these inspections and reviews were not being included in monthly assessment reports because center staff did not have the time to analyze fully the results of third-party monitoring. In some cases, the staff were not even reviewing the reports because they did not understand the results and did not know how to use them as part of the overall monitoring process. As a result, the Inspector General concluded that the center needs to strengthen its monitoring of management and marketing contractors to ensure that performance deficiencies identified by third-party contractors are reported and tracked.
- Several officials whom we interviewed at the Philadelphia center questioned the usefulness of the monthly reports they received assessing the management and marketing contractors' property case files. According to one center official, the summary reports provided by the original contractor were so bad that center staff used only the last page of the report, which indicated the number of files reviewed. In September 2000, the Department hired a new national contractor to conduct operational, management, and performance reviews of each management and marketing contractor. This new contractor is required to develop and maintain a national database file that can be used to perform detailed analyses of the results of the reviews at various levels of risk.
- Center staff cannot obtain from SAMS the information they need to monitor certain aspects of management and marketing contractors' performance. One of the responsibilities the centers have delegated to these contractors is the sale of foreclosed properties under the Officer Next Door and Teacher Next Door programs. Under these programs, HUD allows police officers and teachers to purchase HUD-owned homes at 50

[18] *Philadelphia Homeownership Center Single Family Disposition Activities* (2001-PH-0803, June 14, 2001).

percent off the list price in HUD-designated revitalization neighborhoods.[19] According to one center official, SAMS does not generate reports that list the properties sold through these two programs. Therefore, to oversee the programs, the center must rely on its management and marketing contractors to provide reports listing the properties sold under these programs. Work by HUD's Inspector General indicates that the centers' oversight of the Officer/Teacher Next Door programs has not been adequate. In two recent reports, the Inspector General concluded that the two programs were at high risk for noncompliance and abuse by homebuyers and that HUD had not established adequate management controls over the programs.[20] It found, among other things, that homebuyers had abused the programs by not fulfilling occupancy requirements and thus received unearned discounts of about $735,000. In response to the first report, HUD imposed an immediate 120-day suspension of sales under the Officer/Teacher Next Door programs, effective April 1, 2001. On August 1, 2001, HUD announced that it would resume these programs after having taken some corrective measures to prevent homebuyer fraud, including a review of program procedures.

In addition to the difficulties previously discussed, the homeownership centers also cannot readily obtain the procurement and financial data they need to manage contract costs, which is essential to contractor oversight. In order for the centers to manage their contracting costs, they must know how much they are obligating for and spending on contracts. As the following examples illustrate, however, HUD's information systems do not readily provide the centers with contract obligation and expenditure data:

- The centers could not readily provide us with the amounts they had obligated for single-family contracts in fiscal years 1999 and 2000. The Atlanta center provided us with the most complete information—reports from HUD's procurement system that listed awarded active contracts for different time periods during the 2 fiscal years. The other three centers provided fewer reports from HUD's procurement system and/or estimates. For example, staff at the Philadelphia center manually compiled lists of

[19]Revitalization neighborhoods are neighborhoods that offer significant opportunities for local economic growth and are, therefore, receiving targeted public- and private-sector assistance.

[20]*Interim Results – Officer/Teacher Next Door Program* (2001-AT-0801, Feb. 14, 2001) and *Nationwide Audit Results on the Officer/Teacher Next Door Program* (2001-AT-0001, June 29, 2001).

the contracts the center had awarded for the 2 fiscal years. The staff found this information to be useful and told us they intended to keep the lists current. Later, we were able to request and analyze data from HUD's procurement system to determine how much HUD headquarters and each of the homeownership centers had obligated for single-family contract support in fiscal years 1999 and 2000.

- HUD headquarters took approximately 3 months to provide us information on the funds expended on different types of major single-family contracts during fiscal years 1999 and 2000. When provided, the information did not seem to match the obligation data that we had received and analyzed. HUD initially sought to get the expenditure information from the centers before finally retrieving the data from its financial system. The information HUD provided from this system, however, appears incomplete. Our analysis of data from HUD's procurement system showed that HUD obligated about $465 million for one major single-family contract type, management and marketing services, in fiscal years 1999 and 2000. Yet, the data HUD provided from its financial system showed that expenditures for all major single-family contract types during the 2 fiscal years totaled only about $44 million.

Inadequate Telephone Systems and the Limited Reporting Capabilities of Some Information Systems Reduce the Centers' Ability to Provide Customer Service

The centers' ability to provide service to their external and internal customers has been hindered by inadequate telephone systems and the limited reporting capabilities of some information systems. While the centers' telephone systems generate a number of reports, they do not provide all the information needed to manage the centers' customer service workload. For example, according to the branch chief at Philadelphia's customer service call center, the center's telephone system does not produce any information showing the peak usage times—the times of day that generate the highest volume of phone calls. The Atlanta center director also expressed concern about his ability to track the total number of calls coming into the center. The center's customer service telephone system tracks the number of calls the center receives on its toll-free number, but the calls made directly to program staff, which represent an estimated 25 percent of the center's call volume, cannot be easily tracked. In addition, the centers' telephone systems do not allow telephone calls to be transferred between centers. Finally, because of telephone network inadequacies, more than 14,000 single-family calls were blocked in fiscal year 2000.

In October 2000, the Office of Single Family Housing hired a contractor to assess the single-family toll-free number information systems and operations and identify a more efficient and cost-effective means of

providing customer service. In its March 2001 report, the contractor concluded that some of the single-family telephone systems were strained to the limit and that the systems in place would not provide the services that would be needed in the future. It recommended just one single-family toll-free number for the centers and a tracking system that would provide information on each interaction with the public and include responses to frequently asked questions. According to the Associate Deputy Assistant Secretary for Single Family Housing, the contractor's recommendations are still under consideration.

The centers' information systems also do not effectively support their customer service activities, for they do not allow center staff to generate easily some of the reports their internal customers—center and headquarters managers—need to manage center operations. According to an August 2000 assessment of HUD's loan origination systems needs, the extensive number of reports produced by the current information systems that support the loan origination process do not accurately serve the new FHA business model. Also, an overly rigid reporting process hinders staff's ability to meet their responsibilities. For example, reports are delivered in hard copy on predetermined reporting schedules, and staff must enlist programming help if they want to specify reporting parameters. During our visits to the four centers, we found the following examples of center staff going to great efforts to produce needed reports:

- Staff at two of the four centers must generate reports manually because, while CHUMS has been modified to produce some standard reports by center, it continues to generate other reports by field office only. For a CHUMS user in Philadelphia to prepare a monthly report that shows whether the center is meeting its performance goals, the user must print out a standard report that provides information by field office and enter data for each of the 24 field offices within the center's jurisdiction into a spreadsheet. It takes up to 1 full day each month to prepare this report. Similarly, the CHUMS user in Santa Ana responsible for generating monthly management reports spends 1 day each month manually summarizing data on the 16 field offices in the center's jurisdiction. According to single-family officials, HUD plans to automate part of this process in fiscal year 2002.
- Center staff must print out SAMS reports for each management and marketing contract area in the center's jurisdiction in order to supply monthly data to headquarters on the HUD-owned properties for which the center is responsible. Since 6 of the 16 contract areas fall within Santa Ana's jurisdiction, the center must print out reports for each of the 6 areas each month.

- SAMS' ad hoc reporting feature is so difficult to use that center staff responsible for overseeing property disposition often must request ad hoc reports from headquarters if the system's standard reports do not meet their needs. For example, when the Atlanta center temporarily assumed responsibility for the management and sale of certain properties after terminating a management and marketing contractor, center staff had to request an ad hoc report from headquarters every week. Rather than request an ad hoc report from headquarters, some SAMS users told us that they pull needed information from multiple reports intended for other purposes, which can be time-consuming. In addition, one SAMS user said that she sometimes makes do without the information.

  The Single Family Data Warehouse has helped center staff obtain needed information from multiple single-family legacy systems. However, the data in the warehouse are updated only once a month. According to Office of Single Family Housing officials, the warehouse is helpful to those who want to use historical data to develop trend analyses but is of limited use for day-to-day operational needs. Center staff who need up-to-date data would probably have to go directly to the individual data systems, according to these officials. Another limitation of the warehouse is that it is difficult for most staff to use. Because it requires extensive knowledge of database software, only a few staff at each homeownership center are proficient in using the warehouse. To make the warehouse more useful to the average user, HUD has developed a front-end query tool that enables staff to request basic information without having knowledge of database software. However, advanced queries still require program and database knowledge.

HUD's Plans to Improve Its Single-Family Information Systems Are in the Early Stages

To better ensure that FHA's single-family information systems support the homeownership centers' operations, HUD's Office of the Chief Information Officer is developing an enterprise architecture, and its Office of Single Family Housing is planning improvements to specific information systems. An enterprise architecture defines an organization's current (baseline) and desired (target) systems operating environments and provides a road map for moving between the two. It is an essential tool for effectively and efficiently reengineering business processes and for implementing and evolving their supporting systems. A well-defined enterprise architecture can assist in optimizing an organization's business operations and the underlying information technology supporting these operations.

As required by the Clinger-Cohen Act, HUD's Office of the Chief Information Officer is developing an enterprise architecture for the Department. As planned, its enterprise architecture will define:

- the work HUD performs in achieving the Department's mission,
- the information necessary to deliver programs and operate the Department,
- the automated systems that create or manipulate data to support HUD's business, and
- the technology, such as hardware and software, necessary to support the Department's activities.

As part of its efforts to develop an enterprise architecture for the Department as a whole, the Office of the Chief Information Officer plans to complete its definition of FHA's baseline architecture by the fall of 2001. By January 2002, it expects to define some aspects of the Department's target architecture. According to the Associate Deputy Chief Information Officer for Information Technology Reform, HUD will use this partial target architecture to guide its decisions on the next round of information technology projects to be submitted in March 2002. Once its target architecture is complete, HUD will develop an implementation plan for transitioning over time from the baseline to target architecture.

Although HUD has made progress in developing an enterprise architecture, it has not yet put in place certain management controls for developing, implementing, and maintaining an enterprise architecture recommended by the Chief Information Officers Council. The Council's guidance on best practices for successfully managing an enterprise architecture states that an agency should, among other things, have a written policy that governs the development, maintenance, and use of enterprise architecture and a committee or group that is responsible for directing, overseeing, and/or approving the enterprise architecture.[21] According to its response to our survey of federal departments' enterprise architecture efforts,[22] HUD has drafted an architecture policy, but it has not been approved. Obtaining a clear mandate for the architecture in the form of an enterprise policy statement is a critical success factor and will

[21]*A Practical Guide to Federal Enterprise Architecture, Version 1.0.*

[22]This survey was conducted as part of our ongoing review of federal departments' and agencies' enterprise architecture efforts to gauge progress towards meeting Clinger-Cohen Act and OMB requirements.

be instrumental in gaining the buy-in and commitment of all organizational components of the enterprise, whose participation is vital to successfully developing and implementing the enterprise's architecture. Also according to HUD, it plans to form a committee to oversee its enterprise architecture, although it has not yet done so. Such a committee should be an executive body whose members represent all stakeholder organizations and have the authority to commit resources and to make and enforce decisions for their respective organizations.

Concurrent with the development of an enterprise architecture, HUD's Office of Single Family Housing has developed plans to replace CHUMS, SFIS, and two other systems that support the origination of FHA-insured loans with one system that has greater capabilities. As designed, the new system would support a paperless insurance process, complete with virtual case binders and digitally signed mortgage documents. The Internet would be used as the mode of communication among FHA, its business partners, and service providers. According to a contractor's cost/benefit analysis, HUD could save $70 million by replacing the four old systems with a new system that would operate for 10 years. HUD included funding to begin development of this new system in its proposed fiscal year 2002 budget.

Although plans for a new loan origination system have progressed, HUD has not yet completed its enterprise architecture or assessed the business processes that the new system should support. HUD's Office of Single Family Housing has developed plans for a new system and contracted for a cost/benefit analysis, yet the Office of the Chief Information Officer does not plan to have even a partially completed target architecture until January 2002. Furthermore, the Office of Single Family Housing did not assess the current loan origination processes in place at the centers before laying the groundwork for a new loan origination system. As recently as early August 2001, it was planning to contract out preparation of a functional requirements document for the new system. It decided later that month, however, to delay acquisition of the new system until after it had assessed the current loan origination process. As part of this review, the Office of Single Family Housing plans to assess what information is needed to support the process as well as research the best way to maintain case binders and generate mortgage insurance certificates.

Since HUD has not yet completed its enterprise architecture or examined single-family business processes, it is premature to assess whether these efforts will fully address the centers' information systems needs. However, ensuring that single-family business processes are reviewed and HUD's

enterprise architecture is completed before attempting to acquire a new system would be in accordance with OMB guidance, which requires an agency's information systems investments to be consistent with its architecture. Our experience with federal agencies has shown that attempting to define and build major information technology systems without first completing an enterprise architecture often results in systems that are duplicative, are not well integrated, are unnecessarily costly to maintain and interface, and do not effectively optimize mission performance.

The Office of Single Family Housing also plans to enhance the Single Family Data Warehouse. For example, it plans to add information on nonprofit agencies that participate in FHA's programs and on FHA-insured reverse mortgages.[23] In addition, it intends to expand the front-end query tool that enables users to query the warehouse without having to use database software. However, it has no plans to update the data in the warehouse more often than once a month; therefore, the warehouse still will not be able to provide data essential to meeting day-to-day operational needs.

Conclusions

Given the multibillion-dollar insurance risk that FHA assumes annually, it is critical that the agency's single-family information and telephone systems help it carry out its responsibilities efficiently and effectively. However, the information and telephone systems in use at FHA's four homeownership centers do not support FHA's current business processes or efficiently supply FHA staff with necessary information. Center staff have demonstrated dedication and a willingness to overcome problems with these systems. Still, nonintegrated systems and cumbersome reporting mechanisms make it difficult for them to obtain the information needed to oversee lenders and contractors and provide timely and consistent customer service. Also, because FHA's information systems do not share information, time and effort must be spent pulling together data needed for routine oversight or customer service purposes, and this lengthens response times and increases costs. Staff spend time learning, using, and working around information system problems—time that could be spent in more productive ways. Furthermore, while it seems that the Single Family Data Warehouse should alleviate some of these problems, it

[23]Under its Home Equity Conversion Mortgage Program, FHA insures reverse mortgages—mortgages that convert equity into income—made to older homeowners.

is updated only monthly and requires special technical expertise to extract all but basic reports.

These problems indicate that new single-family information and telephone systems are necessary to support homeownership center operations and reduce insurance risk. However, HUD's Offices of the Chief Information Officer and Single Family Housing have to work together to acquire new systems for the centers. Currently, as required by the Clinger-Cohen Act, the Office of the Chief Information Officer is developing an enterprise architecture to better ensure that HUD's information systems support its business processes. However, HUD has not yet put into place certain architecture management controls recommended by the Chief Information Officers Council. Only if developed and implemented effectively will HUD's enterprise architecture help ensure that the centers have the information and telephone systems necessary to support their efforts to oversee lenders and contractors and provide customer service. Meanwhile, the Office of Single Family Housing has designed a new loan origination system and made plans to assess the loan origination process at the centers before acquiring the new system. While we agree that assessing single-family business processes before acquiring new systems is prudent, any plans to reengineer single-family business processes or improve single-family information systems should fall within the framework of HUD's enterprise architecture. If this does not occur, HUD risks acquiring systems that are not well integrated and do not effectively support the centers' efforts to oversee lenders and contractors and provide customer service.

Recommendations for Executive Action

To address the information system challenges facing HUD's homeownership centers, we recommend that the Secretary of Housing and Urban Development direct the Chief Information Officer and Assistant Secretary for Housing-Federal Housing Commissioner to:

- Implement the best practices for enterprise architecture management recommended by the Chief Information Officers Council, including forming an enterprise architecture steering committee and formulating an enterprise architecture policy;
- Continue delaying any sizable single-family systems acquisition or development until the Department's enterprise architecture is complete; and
- Ensure the development of an enterprise architecture that reflects the Office of Single Family Housing's analysis of business processes and data

needs at the homeownership centers and provides a framework for the future acquisition of single-family information systems.

Finally, we recommend that the Secretary of Housing and Urban Development direct the Assistant Secretary for Housing-Federal Housing Commissioner to implement telephone systems that track the data, such as peak usage periods, that the centers need to manage their customer service workload.

Agency Comments and Our Evaluation

We provided copies of a draft of this report to HUD for its review and comment. In a letter from the Assistant Secretary for Housing-Federal Housing Commissioner (see app. II), HUD did not take issue with any of our findings or factual statements. It agreed with three of our recommendations and expressed concerns about one recommendation. HUD commented as follows on each recommendation:

- HUD stated that it plans to recharter its Technology Investment Board Executive Committee to include oversight of its enterprise architecture. This committee will then be asked to adopt the existing draft enterprise architecture policy after it has completed departmental clearance.
- While HUD agreed that its single-family information systems must be replaced or substantially overhauled in order to meet FHA's business needs, it disagreed that any major efforts to improve these information systems should be suspended until HUD's enterprise architecture is completed. It stated that its Offices of the Chief Information Officer and Housing will immediately review all systems development work planned for single-family systems in fiscal year 2002 and assess whether the development of any significant new capabilities for these systems should be deferred until the target enterprise architecture for Office of Housing systems is under development. In addition, it noted that the Office of the Chief Information Officer will ensure that the information technology project selection process for fiscal years 2003 and 2004 explicitly uses the target enterprise architecture as a major determining factor for selecting an information technology investment for funding. While these are positive steps, we still believe that HUD should delay any sizable single-family systems acquisition or development until the Department's enterprise architecture is complete. Our experience with federal agencies has shown that attempting to define and build major information technology systems without first completing an enterprise architecture often results in systems that are duplicative, are not well integrated, are unnecessarily costly to maintain and interface, and do not effectively optimize mission performance. Therefore, we made no changes to our recommendation.

- HUD noted that the Offices of the Chief Information Officer and Housing will work together to ensure that the information needs of the homeownership centers are integrated into the design and architecture for the single-family business process and subsequent information technology.
- HUD stated that it plans to establish a single toll-free telephone number for FHA's clients and to acquire new telephone equipment and tracking systems to capture information about the caller, the nature of calls, and the number of calls.

Scope and Methodology

We conducted our work at HUD headquarters and at all four of the Department's homeownership centers in Atlanta, Denver, Philadelphia, and Santa Ana. We reviewed documents describing FHA's single-family information systems and telephone systems. We interviewed officials from HUD's Office of Single Family Housing, Office of the Chief Information Officer, and the four centers. Finally, we reviewed documents outlining HUD's enterprise architecture and its plans for specific single-family information systems. We performed our work from July 2000 through September 2001, in accordance with generally accepted government auditing standards.

We are sending copies of this report to the Chairman, Subcommittee on Housing and Transportation, Senate Committee on Banking, Housing, and Urban Affairs; the Chairman and Ranking Minority Member, Senate Committee on Banking, Housing, and Urban Affairs; the Chairwoman and Ranking Minority Member, Subcommittee on Housing and Community Opportunity, House Committee on Financial Services; and the Chairman and Ranking Minority Member, House Committee on Financial Services. We will also send copies to the Secretary of Housing and Urban Development; the Assistant Secretary for Housing-Federal Housing Commissioner; and the Director of the Office of Management and Budget. We will make copies available to others upon request.

Please call me at (202) 512-2834 if you or your staff have any questions about this report. Key contributors to this report are listed in appendix III.

Sincerely yours,

Stanley J. Czerwinski
Director, Physical Infrastructure Issues

Appendix I: Objectives, Scope, and Methodology

Our objectives were to (1) describe the information systems used by the homeownership centers, (2) analyze the effectiveness of these systems in supporting the centers' current operations, and (3) assess the Department of Housing and Urban Development's (HUD) plans for the information systems used by the centers.

To determine what information systems the homeownership centers use, we reviewed a list of HUD's information systems and identified those information systems that support single-family operations. We then interviewed HUD officials to determine which information systems are the major single-family information systems. For the seven major single-family information systems, we obtained and reviewed documentation that described the purpose of and the information contained in each system. At each of the four homeownership centers, we interviewed the director, division heads, and system users to determine which information systems are used to support the center's operations. Our interviews also focused on (1) the databases, including spreadsheets, the centers have developed to support their operations, and (2) the telephone systems the centers use. We obtained and reviewed documentation on these databases and telephone systems.

To determine how effectively these systems support the centers' current operations, we interviewed information system users at each of the four homeownership centers. We asked them about how they use FHA's single-family information systems to accomplish their missions, the training they received on the information systems they use, the quality of the data in the information systems, and information systems' limitations. Our interviews focused on the Computerized Homes Underwriting Management System, the Single Family Acquired Asset Management System, the Approval/Recertification/Review Tracking System, and the Single Family Data Warehouse. We reviewed the procedures followed by the centers to target high-risk lenders for review and identify potential loan fraud cases in order to determine the extent to which the centers can rely on their information systems for data. Similarly, we obtained and analyzed contract obligation data from the HUD Procurement System and contract expenditure data from HUD's Central Accounting and Program System to determine the systems' ability to readily provide complete and accurate contract cost information. We also reviewed a March 2001 HUD-sponsored assessment of the centers' toll-free telephone information systems and operations for information on the strengths and weaknesses of the systems and their ability to provide efficient and cost-effective customer service. Finally, we reviewed reports on our prior work at the centers and reports issued by HUD's Inspector General for information regarding

HUD's oversight of lenders and its management and marketing contractors.

To assess HUD's plans for the information systems used by the centers, we interviewed HUD officials and reviewed documents outlining HUD's enterprise architecture and its plans for specific single-family information systems. Specifically, we interviewed officials from the Office of the Chief Information Officer and reviewed documents to determine the status of HUD's efforts to develop an enterprise architecture. These documents included the Chief Information Officers Council's *A Practical Guide to Federal Enterprise Architecture Version 1.0* and HUD's response to our survey of federal departments' enterprise architecture efforts. We also interviewed officials from the Office of Single Family Housing regarding HUD's plans for individual single-family information systems. Finally, we reviewed documents outlining plans to replace the Computerized Homes Underwriting Management System and three other information systems with one integrated system.

We performed our work from July 2000 through September 2001 in accordance with generally accepted government auditing standards.

Appendix II: Comments From the Department of Housing and Urban Development

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

OCT 10 2001

OFFICE OF THE ASSISTANT SECRETARY
FOR HOUSING-FEDERAL HOUSING COMMISSIONER

Mr. Stanley J. Czerwinski
Director, Physical Infrastructure Issues
United States General Accounting Office
Washington, DC 20548

Dear Mr. Czerwinski:

Thank you for the opportunity to provide comments on the draft report *Single Family Housing: Current Information Systems Do Not Fully Support the Business Processes at HUD's Homeownership Centers*. The report contains GAO's assessment of the adequacy of the Department of Housing and Urban Development's (HUD) information systems and telephone systems to support the Homeownership Centers' operation and oversight of the Federal Housing Administration's (FHA) Single Family mortgage insurance programs.

The objectives of the report were to: (1) describe the information systems used by the Homeownership Centers, (2) analyze the effectiveness of these systems in supporting the Centers' current operations, and (3) assess HUD's plans for the information systems used by the Centers.

The recommendations of the report are that the Secretary of HUD should direct the Chief Information Officer and the Assistant Secretary for Housing-Federal Housing Commissioner to: (1) Implement the best practices for Enterprise Architecture management recommended by the Chief Information Officers Council, including forming an Enterprise Architecture steering committee and formulating an Enterprise Architecture policy; (2) Continue delaying any sizable Single Family systems acquisition or development until the Department's Enterprise Architecture is complete; (3) Ensure the development of an Enterprise Architecture that reflects the Office of Single Family Housing's analysis of business processes and data needs at the Homeownership Centers and provides a framework for the future acquisition of Single Family information systems; and (4) Implement telephone systems that track the data, such as peak usage periods, that the Centers need to manage their customer service workload.

In the last decade, the FHA systems were modified to comply with a number of mandated changes, including the Federal Credit Reform Act, Treasury's Electronic Funds Transfer mandate, government-wide systems generated language (SGL) overhauls, and Y2K, among others. During this time, the budgets for maintaining and enhancing FHA systems were reduced. In addition, the FY 2001 Appropriations Act prohibited the use of program funds to supplement Working Capital Fund allocations. In FY 2001, the budget to maintain and enhance systems supporting the FHA's Single Family program area was approximately $16 million. At the same time, FHA has over 6 million homeowners in its portfolio with active loans totaling $536 billion. With that as background, below are our responses to the recommendations.

Responses to Recommendations:

- **Recommendation: Implement the best practices for Enterprise Architecture management recommended by the Chief Information Officers Council, including forming an Enterprise Architecture steering committee and formulating an Enterprise Architecture policy.**

  Response: The Department plans to re-charter the Technology Investment Board Executive Committee (TIB/EC) to include oversight of the Enterprise Architecture. The TIB/EC has been in operation for three years and oversees the review and approval of HUD's entire portfolio of IT investments. Further, the TIB/EC will assign monthly oversight responsibilities for the Enterprise Architecture to its subsidiary, the TIB Working Group that has a representative from each major program office. Simultaneously, the TIB/EC will be asked to adopt the existing draft Enterprise Architecture policy after the document has completed Departmental clearance.

  The Office of Housing expects to participate actively in the Enterprise Architecture steering committee to ensure that Single Family's business requirements – both in the field and in Headquarters – are part of the planning and development effort.

- **Recommendation: Continue delaying any sizable Single Family systems acquisition or development until the Department's Enterprise Architecture is complete.**

  Response: In general, we agree with the GAO's finding that these systems must be replaced or substantially overhauled in order to meet FHA's business needs. However, we disagree that any major efforts to improve these information systems should be suspended until a HUD Enterprise Architecture is completed. The Office of the Chief Information Officer (OCIO) and the Office of Housing will immediately review all systems development work planned for Single Family systems for FY 2002, and will assess whether the development of any significant new capabilities for these systems should be deferred until the target Enterprise Architecture for Housing systems is under development.

  In addition, the OCIO will ensure that the IT project portfolio selection process for Fiscal Years 2003 and 2004 explicitly uses the target Enterprise Architecture as a major determining factor for selecting an IT investment for funding. The Future State Architecture guides the development and selection of projects in the IT portfolio. The Chief Information Officer plans to have a sufficient outline of the Future State Architecture for the Mortgage and Loan Insurance Business Function later this year. This outline will guide the selection of information systems that best satisfy the business needs of the Office of Housing, including the Homeownership Centers.

- **Recommendation: Ensure the development of an Enterprise Architecture that reflects the Office of Single Family Housing's analysis of business processes and data needs at the Homeownership Centers and provides a framework for the future acquisition of Single Family information systems.**

  Response: The OCIO and the Office of Housing will work together to ensure that the information needs of the Homeownership Centers will be integrated into the design and architecture for the Single Family business process and subsequent information technology.

- **Recommendation**: **Implement telephone systems that track the data, such as peak usage periods, that the Centers need to manage their customer service workload.**

  Response: The Office of Single Family Housing is planning to establish a single toll free telephone number to be used by FHA's clients and the public to access Single Family housing program information and services. The existing call centers will be integrated under a major call center or centers. Plans are to have new telephone equipment and tracking systems installed to capture information about the caller and the nature of calls, as well as the number of calls placed – both incoming and outgoing. The OCIO will support Single Family Housing on meeting its telecommunications needs and telephone systems to enable the HOCs to manage their customer service workload.

I hope this is responsive to the recommendations and brings you up to date on our plans to improve the systems that support our Single Family operations in the Homeownership Centers. If you have any questions, please contact Vernice Buell of my staff on (202) 708-3175.

Sincerely,

John C. Weicher
Assistant Secretary for Housing-
Federal Housing Commissioner

Appendix III: GAO Contacts and Staff Acknowledgments

GAO Contacts

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Paul Schmidt, (312) 220-7681

Acknowledgments

In addition to those named above, Bess Eisenstadt, Daniel Gage, Cathy Hurley, Barbara Johnson, John McGrail, Stanley Ritchick, Stewart Seman, Paige Smith, and Alwynne Wilbur made key contributions to this report.

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