
AUDIT REPORT



Audit of HUD's Central Accounting and Program System (HUDCAPS)

2001-DP-0002
February 27, 2001

INFORMATION SYSTEMS AUDIT DIVISION
OFFICE OF AUDIT



Issue Date	February 27, 2001
Audit Case Number	2001-DP-0002

MEMORANDUM FOR: Victoria Bateman, Deputy Chief Financial Officer, F
Gloria R. Parker, Chief Information Officer, Q

FROM: Benjamin K. Hsiao, Director, Information Systems Audit Division, GAA

SUBJECT: Final Audit Report on HUD's Central Accounting and Program System
(HUDCAPS)

We completed an audit of HUD's Central Accounting and Program System (HUDCAPS). This audit was initiated based on the results of the OIG's Fiscal Year 1999 Financial Statements audit work, which resulted in a disclaimer of opinion. The disclaimer was given, in part, because of HUDCAPS system control weaknesses and Program Accounting System to HUDCAPS conversion problems.

The objectives of our audit were to determine the adequacy of the controls for maintaining data integrity and ensuring that data was protected against loss, errors, or unauthorized use. We evaluated the controls over (1) system maintenance, (2) data reliability, and (3) reconciliation of transactions.

We found significant internal control weaknesses in HUDCAPS as follows: (1) maintenance practices remain weak, (2) controls over data integrity and security access were inadequate, and (3) the Office of the Chief Financial Officer (OCFO) was not effectively utilizing the system for cash reconciliation. We also concluded that HUDCAPS can be a reliable financial management system if the Department is willing to invest the time and resources to correct the deficiencies we have identified. During the audit, the OCFO has taken action to address the reported weaknesses. However, additional efforts are needed to fully correct the control deficiencies described in the report.

Within 60 days, please submit for each recommendation a status report on: (1) corrective action taken; (2) the proposed corrective action and target completion dates; or (3) why corrective action is considered unnecessary.

We appreciate the courtesies extended to the audit staff. Questions or requests for additional information should be directed to me at (202) 708-3444, extension 149.

Attachment

(THIS PAGE LEFT BLANK INTENTIONALLY)

Executive Summary

We have completed our audit of HUD's Central Accounting and Program System (HUDCAPS). The objectives of our audit were to determine the adequacy of the controls for maintaining data integrity and ensuring that data was protected against loss, errors, or unauthorized use. We evaluated the controls over (1) system maintenance, (2) data reliability, and (3) reconciliation of transactions.

During Fiscal Year (FY) 1999, HUDCAPS became the Department's general ledger. HUDCAPS relies on the interface with the Program Accounting System (PAS), which previously served as HUD's general ledger, to provide subsidiary financial information on HUD's grant, subsidy, and loan programs. The OIG issued a disclaimer of opinion on HUD's FY 1999 Financial Statements, in part, because of system control weaknesses and PAS to HUDCAPS conversion problems. Subsequently, our office initiated an audit of HUDCAPS to assist management in correcting the system weaknesses and problems and to prepare for the audit of HUD's FY 2000 financial statements.

As a result of our audit, we found that HUDCAPS, for the most part, was operating as intended. The PAS to HUDCAPS interface is functional and capable of posting the financial transactions accurately and completely to the general ledger. However, we did find significant internal control deficiencies that must be addressed.

System Maintenance

Implementation of configuration management (CM) for HUDCAPS has been continuously delayed. The OIG has reported on this weakness for several years. HUD has not fully implemented CM for HUDCAPS, despite having purchased a CM tool over six years ago. As a result, HUDCAPS remains exposed to errors and system failures from uncontrolled software changes and incorrect version releases. In addition, HUD and contractor personnel performing maintenance functions were granted more access authority than necessary. This weakness exposes HUD to unauthorized changes that could modify, corrupt, or destroy critical data, and disrupt system continuity.

Another deficient maintenance practice is the lack of formal and tested procedures for the restoration process in the event of a system processing disruption. There are no administrative procedures and staff training to support the recovery process and no documented procedures to keep the backup processing current with the application requirements. Without tested formal procedures, there is no assurance that the recovery process would work during a system disruption.

We also had a concern regarding the lack of procedures to timely resolve system and user problems. Some of the problems had been unresolved for over six months. Without an effective problem resolution process, uncorrected errors could continue to corrupt HUDCAPS data and/or prevent users from effectively performing their duties.

During the course of our review, the Office of Chief Financial Officer (OCFO) took steps to address some of the identified maintenance weaknesses. These steps included certifying CM implementation

for HUDCAPS, reducing access privileges for some of the users performing maintenance functions, and establishing procedures to ensure timely resolution of system and/or user experienced problems.

Data Reliability

We found that the Decision Support System (DSS) data was not periodically reconciled with the data in the HUDCAPS production tables to ensure accuracy and completeness. The HUDCAPS DSS is a database that obtains and stores key financial information from various HUDCAPS tables in an easily retrievable format for management reporting and decision making purposes as well as providing data to other HUD systems. Without periodic reconciliation, there is no assurance the DSS is reliable.

Another data integrity control deficiency is the lack of controls over the use of the UTTCOR utility. UTTCOR is a powerful system utility that can be used to resolve data discrepancies by directly altering data in the HUDCAPS financial tables. Access to this utility had been granted to over 20 contractor and HUD personnel. Without limiting the use of UTTCOR, HUDCAPS data is exposed to unauthorized changes.

The third deficiency is that the rejected transactions in the HUDCAPS Document Suspense File (SUSF) were not timely resolved and the posting model for the PAS to HUDCAPS interface was not timely updated. As a result, HUDCAPS financial data may not be current or accurate.

A fourth deficiency is that HUDCAPS had not been timely updated to reflect legislated changes. The dollar amounts for at least two funds in HUDCAPS were misapplied because the funds' balances should have been merged with another fund pursuant to the FY 2000 HUD Appropriations Act. Also, transactions for the 0148 and three no-year funds have not been correctly posted to the general ledger. As a result, HUD program managers could not rely on HUDCAPS for fund control purposes.

The OCFO took actions to address most of the data reliability problems we identified. Beginning in May 2000, the OCFO established a process and procedures to validate the DSS data against the HUDCAPS production data through a record count and dollar total comparison on a monthly basis. Policies and procedures for controlling the UTTCOR utility have been established along with a centrally controlled library for all change requests and approvals. Access to this utility has been restricted to a few key individuals. Also, policies and procedures have been developed for resolving the SUSF file rejection transactions. The 0148 fund has been converted to process transactions through the PAS to HUDCAPS interface and post them to the general ledger.

Use of System for Cash Reconciliation

HUD spent at least \$188,000 for a contractor to develop procedures for the FYs 1999 and 2000 cash reconciliation efforts. This investment was neither cost effective nor efficient. The reconciliation procedures developed involve numerous manual steps that are inefficient and susceptible to data errors or omissions. We believe a more cost effective, efficient, and reliable method would be direct access to the HUDCAPS General Journal file for reconciliation.

Recommendations

HUDCAPS can be a reliable financial management system if the Department is willing to invest the time and resources to correct the deficiencies we have identified. In particular, the Department must complete the configuration management implementation for HUDCAPS, implement controls to protect the integrity of the data, and use already developed automated SF-224 functionality for assisting in the cash reconciliation process.

(THIS PAGE LEFT BLANK INTENTIONALLY)

Table of Contents

Management Memorandum	i
-----------------------------	---

Executive Summary	iii
-------------------------	-----

Introduction.....	1
-------------------	---

Findings

1 HUDCAPS is not Adequately Maintained.....	3
2 Inadequate Controls Over HUDCAPS Data Reliability.....	13
3 CFO is Underutilizing HUDCAPS for the Cash Reconciliation Process.....	29

Management Controls	37
---------------------------	----

Follow Up on Prior Audits	39
---------------------------------	----

Appendices

A PAS to HUDCAPS Interface and Batch Processing Flowchart.....	41
B Auditee Comments	43
C OIG Evaluation of Auditee Comments	63
D Distribution	75

(THIS PAGE LEFT BLANK INTENTIONALLY)

Introduction

In January 1993, HUD purchased the Federal Financial System (FFS) from American Management Systems (AMS) to be the Department's Core Financial System. AMS implemented the FFS to support both administrative and Public and Indian Housing (PIH) Section 8 program accounting. Along with the FFS core system, HUD also uses customized software to meet its financial management and reporting needs. In 1995 the Department named the system HUD's Central Accounting and Program System (HUDCAPS) to reflect HUD's efforts to provide a central standardized accounting environment that will capture, report, control, and summarize financial results of the accounting processes. HUDCAPS was developed to standardize the primary accounting functions (i.e., budget, execution, and funds control, accounts receivable and collections, accounts payable, and general ledger) and provide for a user-driven system that supports the financial aspects of the users' programs. In addition, HUDCAPS, if implemented properly, would conform to the following core accounting standards as mandated by the Federal Government:

- OMB Circulars A-34, A-123, A-127, and A-130
- GAO Title 2/FMFIA (Federal Manager's Financial Integrity Act)
- FHA Program Managers Reporting Requirements
- Joint Financial Management Improvement Program (JFMIP) Core Financial systems Requirements

Maintenance and support for ongoing HUDCAPS operations and development and implementation of new functionality is performed primarily by AMS, along with other contractors, under the oversight of the Office of Administration. The Office of Chief Financial Officer (OCFO), as the system owner of HUDCAPS, is responsible for the day-to-day management and operation of the application. In addition, the Chief Information Officer has recently assumed a leadership role in implementing configuration management and data quality programs for critical HUD applications such as HUDCAPS.

In Fiscal Year (FY) 1999, HUD implemented a Departmental general ledger in HUDCAPS. During FY 2000, HUD disbursed approximately \$11 billion through the payment modules of HUDCAPS.

Audit Objectives

The objectives of our audit were to determine the adequacy of the controls for maintaining data integrity and to ensure that data was protected against loss, errors, or unauthorized use. We evaluated the controls over system maintenance, data reliability, and use of HUDCAPS for cash reconciliation.

Audit Scope and Methodology

We performed our audit work at HUD Headquarters and at the Financial Accounting Center, Fort Worth, Texas. The audit covered the period from March 2000 to October

2000. We conducted interviews with various accounting, program, and contractor personnel and obtained documentation on the policies and procedures related to the internal control areas identified above. We reviewed real-time production HUDCAPS data sets and DB2 tables, Top Secret security definitions, Endeavor configuration management and security definitions, and the structure of the DB2 subsystem.

We also performed selected tests of the on-line HUDCAPS system files using IBM utilities and CA-Top Secret queries. In addition, we traced selected transactions through the Program Accounting System (PAS) to HUDCAPS interface.

The management controls relating to our audit objectives include compliance with the following categories:

- application data input, processing and output integrity;
- application and configuration management security;
- system and application software changes; and
- system and application data maintenance practices.

Our audit was performed in accordance with the Government Auditing Standards issued by the Comptroller General of the United States. Accordingly, we included such tests and other auditing procedures that we considered necessary under the circumstances.

HUDCAPS IS NOT ADEQUATELY MAINTAINED

The OIG has reported the lack of configuration management (CM) as a significant weakness for several years. Until recently, little progress had been made in placing HUDCAPS under the full control of Endeavor, an automated tool purchased for CM implementation of applications residing on the Hitachi mainframe. Additionally, we found that personnel responsible for system maintenance were granted excess access to production HUDCAPS data and software programs. Other system maintenance weaknesses include the inability to timely resolve system and user problems, and no formalized or tested procedures for restoration of HUDCAPS in the event of a system disruption.

We noted that the OCFO has taken corrective action to address some of the problems we reported. The OCFO has certified that HUDCAPS is now under full CM control. Also, during the course of the audit, the CFO established a process and procedures to timely resolve system and user problems. Action was also taken to reduce or terminate specific users with excessive access to HUDCAPS data. However, control deficiencies have not been fully addressed. A data access method, called the bind process, and source modules for the CICS map sets (HUDCAPS online screens) are not controlled through Endeavor. Contractor developers were granted update access to production data without adequate justification. And weaknesses still exist in the HUDCAPS data restoration and backup processes. These deficiencies must be corrected to minimize the risks of errors, omissions, and/or unauthorized activities that could modify, corrupt, or destroy critical data and disrupt system continuity.

Configuration Management has not been fully implemented for HUDCAPS

GAO's Federal Information Systems Controls Audit Manual (FISCAM) Chapter 3.4 states that modifications to system software should be controlled so that only authorized and properly tested changes are performed. Implementing CM for critical applications such as HUDCAPS is an industry accepted practice to ensure system integrity. The purpose of CM is to protect approved software programs from unauthorized changes and provide a control mechanism to ensure that (1) source versions can be associated with the execution modules, (2) version control exists for software changes and releases, (3) there is capability for automated backout of software changes, and (4) emergency changes and access to software libraries and data are controlled.

Several delays have occurred in CM implementation

Over six years ago, HUD purchased Computer Associate's Endeavor, an off-the-shelf commercial software product, as the CM tool for applications residing on the Hitachi mainframe. Endeavor provides version control, change control, and access control to software libraries and data. The HUDCAPS application was set up under Endeavor to take advantage of the automated features for ensuring software integrity.

The OIG has repeatedly reported on the need for CM implementation over the last four years. Despite agreeing to do so numerous times, the Department has continuously delayed CM implementation. Until recently, the Department had made little progress in implementing CM under HUDCAPS. HUD performed an inventory of all HUDCAPS software components that have been placed under the control of Endeavor. This action enabled all software modules to be migrated through the software change migration life-cycle under the control of Endeavor. However, the critical process of compiling software programs into machine recognizable code (or executable modules) was not being controlled through Endeavor. As a result, incorrect versions of software changes could be deployed and cause system disruptions.

Software modules of HUDCAPS are compiled outside of CM process control

HUD was not using Endeavor to control the source code compilation in HUDCAPS. Programmers maintaining applications such as HUDCAPS, write computer program statements in a format termed source code, that is then converted into machine executable code through compilation. Endeavor provides the facility called generate processors to control the compilation from source into executable. Because HUDCAPS modules compilations were not controlled by Endeavor, there was no assurance that the executable code in the production was compiled from the correct version of the source code.

HUD also was not migrating HUDCAPS software releases from development to production through the Endeavor ship function. The Endeavor ship function electronically transfers modules and automatically maintains a log of migrated modules. Until recently, HUDCAPS was using a manual process for releasing software to production, which could result in migrating incorrect versions into production.

During the course of our review, management established a project schedule to complete the Endeavor implementation for HUDCAPS. Although the target date was originally scheduled for the end of September 2000, the implementation date had been delayed to the end of December 2000.

Data access method and change control of on-line screens software remains outside the control of Endeavor

The Department has made significant progress and certified HUDCAPS as being under full CM control in December 2000. However, the certification was not warranted. We found that the bind process, which is used for accessing HUDCAPS DB2 data, is being performed outside the control of Endeavor. The DB2 binding process links a plan (roadmap to the data) with the application program and ensures that the most efficient access path to HUDCAPS data is used. This process also provides an automated mechanism to ensure the proper Job Control Language (JCL) and bind utility are used when changes are made to the software programs. Further, by including the bind process within Endeavor, this ensures a documented history of bind activity for troubleshooting and resolving problems from software changes.

In addition to the fact that the DB2 bind process is not under the control of Endeavor, we also found that the software source modules for the CICS map sets are not being controlled through Endeavor. The map sets are essentially on-line screens for data entry and report generation. Lack of control over the bind process and the source modules for map sets compromises the integrity of the CM process.

Access Controls for System Maintenance Were Inadequate

GAO FISCAM Chapter 3, Section 3.5 provides that work responsibilities should be segregated so that one individual does not control all critical stages of a process. Accordingly, system users should be granted access to only those resources they need to perform their official functions.

Lack of proper segregation of duties between programmers and testers under Endeavor

The Endeavor Lifecycle document prescribes guidelines to ensure that different access profiles are set up based on the job functions of each respective group. When a user signs on to Endeavor, their menu is constructed based on what the security

rules permit them to access. For programmers and approver (e.g. testers) groups, individual users must be explicitly permitted these options through the security definitions. This ensures proper segregation of duties between the programmers and approvers. However, we found that programmers and testers are in the same user profile. Having the testers in the same common security profile as the programmers allows the testers to perform coding, as well as the testing and approving functions.

Profiles with excessive access authority to HUDCAPS production data

During the audit, we also scanned security profiles to determine whether excess access privileges were granted to HUDCAPS programs and data sets. We found two users were provided access to all HUDCAPS production data sets, which was beyond the requirements of their job functions. This allowed them the ability to update, modify, or delete any program libraries in HUDCAPS, which could result in corrupting the data. Also, excessive access rights were given to three users under four HUDCAPS production and/or library data sets. These users had update authority to add, modify, and delete data under their particular data sets which was excessive for their job functions. The three users were employees from the program offices that did not require the update access authority for these data sets. Additionally, two users had update access to two PAS-TO-HUDCAPS interface reject file data sets even though they no longer required this access. Excessive access authority provides an environment where there is a risk that unauthorized changes could be made to production and library resources.

We informed the OCFO of our concerns in this area during the course of our review. The OCFO indicated that corrective actions have been taken. During June and July 2000, contractor update access to the HUDCAPS production was reduced through terminations and access profile revisions. We subsequently verified that the OCFO has taken action to reduce or eliminate access to those individuals noted above. However, as part of our verification work we noted a serious access control problem still exists. We found that contractor developers have been granted update access to production data. We made a recommendation to address this deficiency in the FY 2000 Financial Statement Audit.

The OCFO needs to ensure that segregation of duties is maintained when establishing access controls for CM and that monitoring procedures are established to ensure that excessive access privileges are not granted.

Weaknesses Exist in the HUDCAPS Data Restoration and Backup Processes

National Institute of Standards and Technology Special (NIST) Publication 800-12 defines service continuity controls as an event with the potential to disrupt computer operations, thereby disrupting critical mission and business functions. This contingency planning involves more than planning for a move offsite after a disaster destroys a data center. It also involves how to keep an organization's critical functions operating in the event of disruptions, both large and small. For this reason, an agency should have procedures in place to protect information system resources and minimize the risk of unplanned interruptions. Additionally, GAO's FISCAM Chapter 3.6 states that the frequency of testing will vary depending on the criticality of the entity's operations. Generally, contingency plans for very critical functions should be tested every year or two. Accordingly, service continuity testing at all levels should be incorporated as part of the agency's contingency plan testing.

In the event of a system failure or disruption, processes need to be in place to restore and backup the data. Depending on the severity of system disruptions or failures, different levels of data backups and restore processes would be used. For instance, if an entire facility is down, HUD's Business Resumption Plan (BRP) would go into effect and HUDCAPS would be restored by the system programmers at the data center. However, for less severe disruptions such as equipment failures or data base corruption, applications programmers and the data base administrator would work together to restore the data.

No written procedures nor testing and training performed for the data recovery process

We found that, other than the BRP, there are no written procedures for the HUDCAPS application recovery process. Also, a test has not been conducted to determine whether the restoration process would work in the event of a system failure or disruption. Additionally, administrative procedures such as staff coordination, supervisory control, work schedule, and

training of staff to support the recovery process have not been established.

No written procedures to ensure the data backup process is updated to include added files

Another weakness is that the current procedures do not include steps to ensure that backup processing includes data files that have been added to the application since the last backup. We discussed this issue at a meeting with a staff member from the OCFO and the contractors providing HUDCAPS technical support. They were not aware of any procedures that addressed this deficiency. Without written procedures to ensure that backup processing includes the additional files, there is the possibility that the backup process would fail or produce erroneous results.

HUDCAPS Problem Resolution Process Resolving System and User Problems in a Timely Manner Was Ineffective

The OCFO's Financial Systems Maintenance and Development (FSMD) Division holds weekly HUDCAPS Technical and Functional meetings. Attendees include AMS, the maintenance support contractor for HUDCAPS, along with personnel from the Office of Information Technology and other program offices. A main purpose of the meetings is to discuss HUDCAPS problems.

Problem resolution process was ineffective

During our review, we noted that the HUDCAPS system and application problems were not timely resolved. There were no procedures for properly prioritizing and resolving these problems. As a result, some critical problems remained unresolved for an extensive period of time.

Based on observations at the meetings and a review of the list of Service Ticket Action Resolution System (STAR), the Departmental problem/resolution tracking system, for April 26, 2000, we found six of 25 (24 percent) problem records that were open for six months or longer. There were no formal process and procedures in place to prioritize and timely resolve the problems. After informing the OCFO of our concern, the OCFO then established procedures in May 2000 to prioritize, assign resources and established timeframes for problem resolution. The procedures

appeared adequate and no recommendation is needed in this area.

Auditee Comments

The OCFO provided written response to our draft audit report on December 28, 2000. The OCFO's response included both summary and detailed comments. The OCFO's full response is included in Appendix B. The summary comments for Finding 1 are provided below.

The OCFO generally agreed with the conditions of the finding but indicated the significance of the finding was overstated because corrective actions have been completed on three of the four deficiencies reported. The OFCO, with IT support, certified that configuration management for HUDCAPS has been implemented in December 2000, on access controls in July 2000, and on the problem resolution process in June 2000.

In the area of CM, the draft audit report fails to recognize that HUDCAPS was the furthest along of any major system in being fully implemented under CM. The OCFO made a prudent management decision to postpone implementation of full configuration management until after year-end closing of HUDCAPS for FY 2000, rather than introduce technical risks into the critical annual close process. The December 2000 target date was accomplished.

In regards to the finding that there are a number of weaknesses in the HUDCAPS data restoration and backup process, the OCFO indicated that auditing standards require testing of Contingency Plans every year or two. The report's finding does not identify any criteria for testing an individual application system annually.

OIG Evaluation of Auditee Comments

The intent of our finding on configuration management was to express our concern about the implementation delays of CM for HUDCAPS. At the time of our issuance of the draft report, the OCFO had delayed the implementation of CM in

HUDCAPS from the target date of September 30, 2000 to December 31, 2000. However, we recognize that the OCFO has taken action to substantially implement CM for HUDCAPS as of December 16, 2000. Accordingly, we will incorporate this action in the final report as well as remove recommendation 1A.

In the area of inadequate access controls for system maintenance, we did reflect in the draft report that the OCFO had taken action during June and July 2000 to reduce contractor update access to HUDCAPS. However, we found that the developers continue to have access to HUDCAPS production data.

We have modified the report as appropriate based on the OCFO's comments. Appendix B contains the OCFO's comments to the draft report and Appendix C contains a detailed evaluation of the OCFO's comments.

Recommendations

We recommend that the Chief Financial Officer work with the Chief Information Officer to:

- 1A. Ensure the DB2 bind process and source modules of CICS map sets are implemented under Endeavor.
- 1B. Ensure that segregation of duties is maintained when establishing access controls for CM.
- 1C. Establish monitoring procedures to ensure that excessive access privileges are not granted.
- 1D. Establish procedures for the HUDCAPS data recovery process for less severe disruptions such as equipment failures or data base corruption, applications in which programmers and the data base administrator would work together to restore the data.
- 1E. Execute a data recovery test for HUDCAPS involving all impacted personnel. This test should be performed as part of HUD's annual or semiannual testing of their Business Resumption Plan.

- 1F. Establish administrative recovery procedures for HUDCAPS such as staff coordination, supervisory control, work schedule, and training of staff.
- 1G. Establish a process to ensure that backup procedures for HUDCAPS are updated whenever new files are added to the application.

(THIS PAGE LEFT BLANK INTENTIONALLY)

INADEQUATE CONTROLS OVER HUDCAPS DATA RELIABILITY

There are a number of deficiencies in the quality controls over HUDCAPS data. The weaknesses we found include:

- Reconciliation between the Decision Support System (DSS) and the HUDCAPS production data to ensure accuracy and completeness has not been performed.
- Use of UTTCOR for direct updates to HUDCAPS data has not been adequately controlled.
- HUDCAPS rejected transactions processed through the HUDCAPS Document Suspense File (SUSF) have not been reconciled and processed in a timely manner.
- The posting model for the PAS to HUDCAPS interface has not been updated.
- HUDCAPS general ledger has not been updated to reflect legislated changes.
- Transactions of several no-year funds have not been posted automatically to the general ledger because they were not processed through the PAS to HUDCAPS interface.

These weak controls reduce the data reliability of HUDCAPS. Because there was no reconciliation between DSS and HUDCAPS data, HUD management could not rely on the standard DSS reports for financial management of HUD's administrative accounting and the Section 8 program. Also, without controlling the use of UTTCOR, HUDCAPS data would be exposed to unauthorized changes. In addition, incomplete or invalid processing could occur due to (1) rejected transactions not being resolved on a timely basis, (2) the posting model and the general ledger not being updated, and (3) no-year fund transactions not being posted automatically to the general ledger. As a result of these deficiencies, HUD's critical financial data could be corrupted

OMB Circular A-127 provides that financial management systems shall include a system of internal controls that ensure resource use is consistent with laws, regulations, and policies; resources are safeguarded against waste, loss, and misuse; reliable data are obtained, maintained, and disclosed in reports. In addition, appropriate internal controls shall be applied to all system inputs, processing, and outputs.

DSS Data Were not Reconciled With the HUDCAPS Production Data

The HUDCAPS DSS extracts and stores key financial information from various HUDCAPS tables that HUD uses primarily for standardized, specially requested, and ad-hoc reporting purposes. HUDCAPS DSS is also used to extract information, which is then transmitted to other HUD application systems for their use.

The DSS is comprised of three databases, each of which contains a subset of HUDCAPS data. DSS is updated nightly. Selected HUDCAPS tables are copied each night into the DSS. In addition, a COBOL program is run each night to extract selected HUDCAPS data. This data is subsequently appended to the DSS databases. Because these tables do not exactly mirror the HUDCAPS production tables, it is critical that an adequate reconciliation process be in place to ensure that the data in the DSS is accurate and complete. Since HUD relies on the DSS for financial reporting purposes and the information is used in other applications, it is essential that the data be accurate and reliable.

Data reconciliation between DSS and production tables were not regularly performed

The OCFO did not establish procedures to reconcile the data in DSS with HUDCAPS production data. Without a periodic reconciliation, there is no assurance that the data in the DSS is accurate and complete. Although OCFO personnel and the HUDCAPS database administrator verified that the selected HUDCAPS tables were copied correctly into the DSS, the results from the COBOL programs were not completely verified. Record totals, dollar amounts, and control totals were not regularly compared and reconciled. This process is a primary control to ensure that data passed from one data source to another is accurate and complete.

We were told that data reconciliation was performed only when inconsistencies were identified. However, there were no documented results or written procedures to indicate that reconciliation was ever performed. It is crucial that record counts and data validation and reconciliation of the DSS data be performed on a regular basis. Without these

procedures in place, there is a risk that HUDCAPS DSS may contain inaccurate and incomplete data, which could result in the production of erroneous financial reports.

As a result of our review, HUD indicated that beginning in May 2000, a process was established to validate the DSS data against the HUDCAPS production data through a record count and total dollar comparison on a monthly basis. We performed an analysis and validated the DSS procedures and process established by HUD in October 2000 and found them to be adequate. As a result, we are not making any recommendation in this area.

Control Over Use of the UTTCOR Utility Needs Further Strengthening

UTTCOR is a powerful table correction utility used to correct data inconsistencies and errors in HUDCAPS. It is used to directly modify and update production tables that cannot be fixed by normal system processing.

UTTCOR utility was not properly controlled

During the FY 1999 Financial Statements Audit, we discovered this powerful system utility was not properly controlled, thus exposing HUD's critical financial data to possible errors and fraudulent activities. As a result of the audit, the OIG recommended that the use of this utility be restricted to authorized personnel and that an adequate audit trail be maintained by establishing (1) policies and procedures for controlling the use of the UTTCOR utility, (2) centralized control over all change requests and approvals, and (3) a central library for input and parameter files.

Significant improvements were made but more control is needed over the storage of input files for UTTCOR

During our current audit and prior to the issuance of the draft report of HUDCAPS, we reviewed the actions taken by HUD to address our previous recommendations. HUD has since established policies and procedures for controlling UTTCOR. Manual procedures are in place to manage UTTCOR use. An MS Access database is being used by the OCFO for tracking the UTTCOR requests. The purpose of the database is to provide a means for recording the audit trail, such as signoffs of authorization to execute UTTCOR. Additionally, the OCFO has reduced access to this utility to

a few key individuals and established a centrally controlled library for all change requests and approvals. However, we found that contractor programmers were still storing input files for UTTCOR use in their private libraries of software programs on the system. Files stored in private libraries can be deleted or altered by the owner without detection. As a result, unauthorized use of UTTCOR can occur. This vulnerability can be eliminated by simply requiring that all input files for the UTTCOR utility be stored in centrally controlled production libraries on the system.

Subsequent to the draft report, we verified that standard input files are now being used instead of contractor's personal libraries. However, our review of the MS Access database, which is an integral part of the audit trail, does not conform to their established policies and procedures. We found that the database contains missing information and several inaccuracies. For example, the audit trail records had incorrect dates of UTTCOR access, missing point of contacts, and wrong problem identification numbers.

Rejected Transactions in the SUSF File are not Timely Resolved

The SUSF is a key file used to store all documents as they are entered and/or processed in HUDCAPS. A HUDCAPS document consists of a series of transactions to disburse funds, record receivables, fund control, etc. A primary function of this file is to store rejected transactions for the purpose of reconciliation prior to processing and posting to the general ledger. Transactions could be rejected for a variety of reasons, such as invalid account information, insufficient funds, and other edit checks. Rejected transactions should be timely reconciled and processed to ensure accurate, complete, and up-to-date financial data are available for management decisions.

Rejected transactions in the SUSF file are not reconciled in a timely manner

The OCFO had not established procedures to timely reconcile and process rejected transactions in the SUSF. We judgmentally selected the April 18, 2000 SUSF file for our review. This file contained 36,351 transactions, with 23,305 (64%) attributed to the PAS to HUDCAPS interface transactions and 13,046 (36%) for on-line and other

interface transactions. Of the 36,351 total transactions, 5,910 transactions (16%) represent rejected transactions with 141 (2%) attributed to the PAS to HUDCAPS interface transactions and 5769 (98%) to on-line and other interface transactions.

We judgmentally selected all of the PAS to HUDCAPS rejected transactions and transactions for three of the document types (CO, M1, and SA), that made up the majority of the online rejected transactions, to determine the length of time the rejected transactions have remained in the SUSF file. Table 1 provides the results of our aging analysis of the rejected transactions.

Based on our analysis, approximately 25 percent of the PAS to HUDCAPS interface rejected transactions in the SUSF had not been reconciled within 3 months. However, we noted that the online transactions remained unresolved for even a greater period of time. The analysis showed that approximately 25 percent of the rejected on-line transactions, which have not been reconciled, were over 6 months old with almost 11 percent over a year old. In fact, we found one rejected on-line transaction has been in the SUSF file for almost five years. Incomplete and untimely transaction resolution would adversely affect the processing and reporting of critical financial data in the HUDCAPS system.

**Aging Analysis of PAS to HUDCAPS
and On-line Rejected Transactions**

Document Type ¹	Number of Transactions Rejected	0 to 3 months	3 to 6 months	6 to 12 months	Over 1 year
PAS/HUDCAPS Interface (Batch)					
IP	66	51	11	4	0
IT	72	54	10	8	0
UD	3	0	3	0	0
Subtotal	141 (100%)	105 (74.5%)	24 (17.0%)	12 (8.5%)	0
Direct User Input (On-line)					
CO	1181	1040	16	98	27
SA	710	656	22	20	12
M1	669	123	49	259	238
Subtotal	2560 (100%)	1819 (71.1%)	87 (3.4%)	377 (14.7%)	277 (10.8%)
Total	2701	1924	111	389	277

Table 1

CFO has taken steps to reduce the number of rejected transactions but more needs to be done

The Office of Chief Financial Officer (OCFO) recognized that they could not readily reconcile rejected transactions on the SUSF. Accordingly, the OCFO directed AMS, the maintenance contractor for HUDCAPS, to develop an enhancement to automate the reconciliation process for those transactions in the SUSF file that were rejected by the PAS to HUDCAPS interface. As part of this enhancement, the OCFO directed the contractor to extract SUSF files which are loaded each night in the CFO Data Mart for analysis the following day. The OCFO also recently established SUSF file maintenance procedures to manage and resolve all the rejected transactions. The OCFO will use various sorting and analysis tools to resolve and clear rejected transactions. Reports have already been developed to sort and arrange the rejected transactions that make it

¹ IP--PAS to HUDCAPS Transaction, IT--PAS to HUDCAPS Payment Voucher, UD--PAS to HUDCAPS Up/Down Adjustment, CO and M1--Miscellaneous Orders, SA—Sub-Allotment

more manageable to analyze the errors. For those documents that are entered directly into HUDCAPS by the users, the OCFO would send periodic reminders to the user community to clean up their SUSF rejected transactions, including a reminder during the month of August each year. Any rejected transaction remaining at the end of the fiscal year would be deleted.

Although the actions taken by OCFO are commendable, additional improvements are needed. In addition to the periodic reminders, the OCFO should send monthly reports to the program offices that show the age of the on-line rejected transactions and the reasons for the rejections. The OCFO should also consider deleting the program offices' on-line rejected transactions on a quarterly basis.

With respect to the PAS to HUDCAPS interface, there should be a policy that rejected transactions be resolved and cleared from the SUSF on a monthly basis. Both the number and the dollar value of transactions processed through the PAS to HUDCAPS interface are significant. The rejected transactions, if not timely resolved, could significantly affect the accuracy of the financial data in the general ledger.

PAS to HUDCAPS Interface Posting Model not Timely Updated

HUDCAPS uses the Common Posting process for posting each transaction to the general ledger and journals. This process uses information entered in a HUDCAPS electronic document to determine what Standard General Ledger accounts should be posted and what journals should be updated. A set of posting models has been developed to define the accounting rules for each type of transaction. The documentation for the posting models describes the various types of transactions and defines various attributes, which allow HUDCAPS to automatically determine and post the accounting entries as debits and credits to the appropriate accounts in the general ledger.

Our testing revealed that a number of postings to the general ledger did not agree with the PAS to HUDCAPS interface posting model documentation. The

Thirteen posting transaction discrepancies with an absolute (both credit and debit) value of \$10.5 million found

implementation of the posting model for PAS to HUDCAPS interface consists of maintaining the following HUDCAPS' referenced tables: (1) GLXT-General Ledger Crosswalk Table, (2) ACED-Accounting Entries Definition Reference Table, and (3) ACEN-Accounting Entries Reference Table. We compared the posting model documentation for the PAS to HUDCAPS interface, dated April 18, 2000, with the actual postings in general ledger for that date. We found 13 posting transactions under six PAS Transaction Codes (TAC), with an absolute value of \$10.5 million, that were posted to general ledger accounts in HUDCAPS but differed with the posting model documentation (See Table 2). As shown in Table 2, there were six Accounting Entity (ACEN) ID's in the HUDCAPS general ledger (AAUP, AADN, ADCD, SV42, SVMML, SVMR) that were not identified in the posting model. Also, we found two ACEN entries in the HUDCAPS general ledger, CR38 and CR39, that were different from the ACEN's in the posting model documentation.

CFO lacked procedures for updating the posting models documentation to ensure accurate general ledger postings

These discrepancies could be the result of either out-of-date documentation or erroneous postings. In either case, the OCFO cannot be assured that all transactions have been accurately recorded in the general ledger. To control the accuracy of the posting process, the OCFO must establish procedures to update the posting model documentation and use the documentation to verify the accuracy of all postings. Although there are procedures established for the general ledger, they do not include specific procedures to update the PAS to HUDCAPS interface posting model documentation.

Comparison of General Ledger Postings to the Posting Model

GENERAL LEDGER POSTINGS ²					POSTING MODEL	
TAC	TC	TT	ACEN	Amount ³	ACEN	Posting Error Amount ²
301	IT	PV	PV01	\$46,287,742.39	PV01	
301	IT	PV	AAUP	2,046,081.95	Missing	\$2,046,081.95
301	IP	MO	MO01	46,770,383.47	MO01	
301	IP	MO	AADN	2,153,136.64	Missing	2,153,136.64
301	UD	U1	AAUP	2,153,136.64	Missing	2,153,136.64
301	UD	D1	AADN	2,153,136.64	Missing	2,153,136.64
3IP	IP	MO	MO01	5,921.58	MO01	
3IP	IP	PV	PV01	5,921.58	PV01	
3IP	IP	CD	ADCD	5,921.58	Missing	5,921.58
3IPR	IP	PV	PV01	1,423,527.60	PV01	
3IPR	IP	MO	MO01	1,423,527.60	MO01	
3IPR	IP	CD	ADCD	1,423,527.60	Missing	1,423,527.60
599	IP	42	SV42	35,340.00	Missing	35,340.00
599	IP	ML	SVML	15,733.01	Missing	15,733.01
599	IP	MR	SVMR	15,733.01	Missing	15,733.01
599R	IP	ML	SVML	5,165.92	Missing	5,165.92
599R	IP	MR	SVMR	5,165.92	Missing	5,165.92
414	IP	38	CR38	103,453.07	DTLI	103,453.07
414	IP	39	CR39	344,400.59	DTLP	344,400.59
			TOTAL	<u>\$106,376,956.79</u>		<u>\$10,459,932.57</u>

Table 2

² TAC - PAS Transaction Code; TC - HUDCAPS Transaction Code; TT - HUDCAPS Transaction Type; ACEN - HUDCAPS Accounting Entity ID

³ These are absolute amounts.

Fund Accounts in HUDCAPS General Ledger Have not Been Updated to Reflect Legislative Changes

Cumulative accounting differences of \$327,781.95 exist between HUDCAPS and manual SF-224's

The Office of the Chief Financial Officer (OCFO) prepares a required monthly cash transaction activity report (SF-224) for the Treasury Department. We compared data of three selected payment schedules (LH 6807, LH 6808, and LH 6809) between the automated SF-224 generated by HUDCAPS with the same payment data in the Accounting, Monitoring, and Analysis Division (AMAD) manually prepared SF-224 for the month of April 2000. There were cumulative accounting differences amounting to \$327,781.95 between the SF-224 in HUDCAPS and the manually prepared SF-224 (See Table 3).

Differences between HUDCAPS and Manually Prepared SF-224's

HUDCAPS SF-224		MANUAL SF-224	
<u>Appropriation</u>	<u>Amount</u>	<u>Appropriation</u>	<u>Amount</u>
0192	\$1,415,297.38	0192	\$2,747,042.44
0192-98	813,962.13		0.00
0192-99	190,000.98		0.00
Subtotal	<u>\$2,419,260.49</u>	Subtotal	<u>\$2,747,042.44</u>
0188	\$49,595.45	None	\$0.00
0204	<u>278,186.50</u>	None	<u>0.00</u>
Subtotal	<u>\$327,781.95</u>	Subtotal	<u>\$0.00</u>
Total	<u>\$2,747,042.44</u>	Total	<u>\$2,747,042.44</u>

Table 3

As the table shows, there were two appropriations, 0188 and 0204 with payment amounts totaling \$327,781.95 identified in the HUDCAPS SF-224 that were combined under appropriation 0192 in the manually prepared SF-224. We discussed these differences with OCFO personnel. They indicated that legislative changes in HUD's FY 2000 appropriations required the Department to transfer amounts from appropriations 0188 and 0204 into appropriation 0192. However, the OCFO had not modified HUDCAPS to reflect the legislated changes until the end of the fiscal year prior to the closing of the books, approximately one year after the legislative changes became effective. The

detail transactions supporting these three fund balances in the general ledger would be inaccurate during the fiscal year.

Since we examined a limited number of payment schedules, there could be other fund accounts besides appropriation 0188, 0204, and 0192 that should have been updated. Without keeping the fund accounts current in the general ledger, HUD program managers could not rely on HUDCAPS reports for fund control purposes.

Fund Conversion of PAS to HUDCAPS Interface is Incomplete

Beginning FY 1999, HUDCAPS was considered HUD's official Department wide general ledger for all HUD accounts except for Fund 0148 which remained in PAS. Financial transactions recorded in PAS must also be recorded in the HUDCAPS general ledger. To accomplish this, the OCFO developed an interface program to transfer the accounting information from PAS to HUDCAPS. This PAS to HUDCAPS interface is a complex program with many components (See Appendix A). Based on the business and accounting rules, the PAS transactions are either filtered out or processed through the interface to the HUDCAPS general ledger.

We tested the interface from PAS to HUDCAPS by tracing one day's transactions through the system to determine if the interface was working properly. We found that, for the most part, the interface was working as intended. However, the interface program did not post the transactions of the 0148 fund and three X no-year funds (4098, 4015A and 4015) into the HUDCAPS general ledger. Prior to August 2000, the OCFO manually posted the transactions of the three X funds excluding 0148.

Transactions of \$304 million from four funds being posted manually to HUDCAPS

The disbursement transactions of the funds we tested amounted to approximately \$304 million dollars in FY 2000. They were recorded by the PAS to HUDCAPS interface into memorandum accounts 9998 and 9999. These disbursements should have been recorded as debits and credits to the appropriate asset and liability accounts in

the general ledger. The memorandum accounts are not part of the Standard General Ledger (SGL) accounts and should be used only as holding accounts and for information display purposes (such as footnote or statistical data). As a result of the incomplete postings, HUDCAPS cannot be relied upon for financial reporting and reconciliation purposes for the 0148 and the three X funds.

We discussed this posting problem with the OCFO and recommended that the OCFO enhance the PAS to HUDCAPS interface programs so the disbursement transactions from the four funds would be recorded correctly in the general ledger. The OCFO claimed that they did perform manual posting for the three X-funds at the summary level (debits and credits combined as summary totals), but had not posted any of the 0148 transactions into HUDCAPS until August 2000. The OCFO further explained that these funds were supposed to be converted during the implementation of PAS to HUDCAPS interface, but were deferred because of time constraints. The OCFO also indicated that the 0148 fund has been processed through the interface effective August 2000 and will use the 0148 interface model to send the remaining X fund data in PAS to HUDCAPS. It is our position that the PAS to HUDCAPS interface should be used to the maximum extent possible. This would ensure more efficient processing of transactions and avoid errors and omissions that are more likely to occur from manual processing.

Subsequent to our discussion, we verified whether the OCFO has taken any action to correct the interface posting errors. As of November, we found that the 0148 fund is processed through the interface, but not the three X funds (4098, 4015A and 4015). The transactions from these X funds are currently filtered out of the interface completely and manually posted in HUDCAPS. This practice poses two risks: (1) the risk of errors and omissions from manual postings still exists, and (2) the loss of audit trails. The previous method of using the memorandum accounts to record the transactions of the three X funds, although flawed, at least provided audit trails. The current method makes it difficult to determine whether all of the transactions of the three X funds have been correctly posted to the HUDCAPS general ledger.

Auditee Comments

The OCFO provided written response to our draft audit report on December 28, 2000. The OCFO's response included both summary and detailed comments. The OCFO's full response is included in Appendix B. The summary comments for Finding 2 are provided below.

The OCFO indicated that most of the deficiencies reported were based on the field work conducted in March and April 2000. However, the auditors did not perform due professional care in following up on the status of the finding prior to the end of the field work (i.e. October 2000). In fact, most of the corrective actions had been completed during the period of May to October 2000.

With respect to the control over the use of the software utility UTTCOR, the audit report failed to clearly recognize that access to the UTTCOR had been restricted to a few individuals, and that the responsibility for execution of the utility had been transferred from development contractors to production control contractors in November 2000.

**OIG Evaluation of
Auditee Comments**

The OCFO's comment that the OIG did not exercise due professional care is misplaced. The OCFO indicated that the report was not issued timely since most to the deficiencies were based on the field work conducted in March and April 2000, but that corrective action had been taken for most of the issues from May to October, 2000. The OCFO cited the OIG for not complying with Sections 7.6 and 7.7 of the "Yellow Book" that dealt with timeliness of reporting. However, Section 7.8, which was not cited by the OCFO in their comments, provides that "The auditors should consider interim reporting, during the audit, of significant matters to appropriate officials. Such communication, which may be oral or written, is not a substitute for a final report, but it does alert officials to matters needing immediate attention and permits them to correct them before the final report is completed." We complied with this auditing standard by providing the OCFO, as part of the weekly status meetings, any preliminary findings or issues that we had developed. Where we were informed that corrective action was taken,

we verified, to the extent practicable, that such actions were taken and reported accordingly.

In regard to the UTTCOR finding, we have verified that standard input files are now being used instead of contractor's personnel libraries. However, our review of the MS Access database, which is an integral part of the audit trail, does not conform to their established policies and procedures. We found that the database contains missing information and several inaccuracies. We have reported this condition in our draft audit report on HUD's FY 2000 Financial Statement.

We have modified the report as appropriate based on the OCFO comments. Appendix B contains the OCFO's comments to the draft report. And Appendix C contains our detailed evaluation of the OCFO's comments.

Recommendations

We recommend that the Chief Financial Officer:

- 2A. Provide to the program offices a monthly aging listing of their applicable SUSF rejections and any other reports or listings which may assist them in resolving and clearing their rejected transactions.
- 2B. Delete quarterly those rejected transactions on the SUSF that are at least three months old.
- 2C. Establish a policy to resolve and reconcile all PAS to HUDCAPS rejected transactions on a monthly basis.
- 2D. Establish formal policies and procedures to ensure that the PAS to HUDCAPS posting model is timely updated.
- 2E. Timely update the HUDCAPS general ledger at the detail transaction level to reflect all appropriate legislative changes such as the combination of the 0188 and the 0204 funds into the 0192 fund.
- 2F. Convert 4098, 4015.A, and 4015 funds so their transactions are processed completely through the PAS to HUDCAPS interface and posted to the correct SGL accounts. In addition, review all of the X funds to determine whether any other funds can be converted and

processed through the PAS to HUDCAPS interface to be posted to the appropriate SGL accounts

(THIS PAGE LEFT BLANK INTENTIONALLY)

OCFO IS UNDERUTILIZING HUDCAPS FOR THE CASH RECONCILIATION PROCESS

HUD is using manually intensive and time consuming processes to reconcile its cash transactions to the Treasury records rather than using HUDCAPS, even though this system contains all of the needed data for reconciliation. Relying on manual processes for cash reconciliation are inefficient, susceptible to data errors and omissions, and increases the risk that HUD's financial statements may be materially misstated.

Treasury Directive 32-05 describes the responsibilities for establishing and maintaining fiscal accounting systems. Fiscal accounting systems comprise the Treasury systems of central accounting and financial reporting for the Federal Government. These systems are structured for the purposes of: (1) consolidating the accounting results of all operating agencies with those of Treasury to disclose complete and accurate monthly and fiscal year information reflecting the revenues and outlays, and related assets and liabilities directly related to the cash operations of the Treasury; (2) effectively managing the Government's cash; (3) safeguarding assets against waste, loss, or improper or unwarranted use; and (4) conforming to the accounting principles, standards, and related requirements prescribed by law.

Contractor Developed Cash Reconciliation Methodology is Inefficient and Error Prone

Background

Beginning in FY 1999, HUDCAPS became the official Department-wide general ledger. Prior to this, the PAS was HUD's official general ledger. In FY 1999, the OCFO implemented a PAS to HUDCAPS interface, which is used to transmit spending transactions from PAS to HUDCAPS. Millions of dollars are passed through this interface daily.

HUD reconciles its cash transaction activity to the Treasury's records. This cash reconciliation process compares each appropriation's cash balance in the general

ledger with Treasury's records to ensure that all cash activities are identified, recorded, and accounted for correctly. An integral part of this process is the preparation of the SF-224 Statement of Transactions report which is used by Federal agencies to report their monthly payment and collection activity to Treasury. Treasury Financial Manual, Volume 1, Section 3330 - Preparation of FMS Form SF-224, states that each reporting office will prepare the SF-224 directly from its accounts at the close of each accounting month.

The OCFO is relying on an existing manually intensive method for SF-224 reporting and cash reconciliation rather than using the automated SF-224 function in HUDCAPS. The AMAD office, which is responsible for preparing the SF-224 reports at Headquarters, still uses a Dbase III database file to prepare the SF-224 reports. The AMAD office manually keys all payment and collection documents received each month into this Dbase application. Once these documents are verified, the appropriate information from these documents are used to prepare the SF-224 that is submitted to Treasury. This manual method is cumbersome and has resulted in differences between the official general ledger and the prepared SF-224 reports.

At least \$188,000 spent by HUD for FY 1999 and FY 2000 reconciliation efforts

The OCFO in March 2000 hired a contractor to establish a methodology and procedures to reconcile cash transaction data between the HUDCAPS general ledger and the manual SF-224 reports submitted to Treasury. The contractor has developed an MS Access database to match the general ledger data with the manual SF-224 data to identify the unreconciled differences for FY 2000. As of the end of May, the contractor has billed HUD in excess of \$188,000 for the Fiscal Years 1999 and 2000 reconciliation efforts to include the cash reconciliation methodology.

Draft cash reconciliation methodology is manually-intensive with data obtained and joined from different tables

We reviewed the most current draft methodology (as of October 17, 2000) developed by the contractor and found the cash reconciliation methodology is manually-intensive and inefficient (See Chart 1 below.) Data was obtained from both HUDCAPS and PAS applications that were then joined in order to provide the information to reconcile with the manually prepared SF-224s.

CONTRACTOR'S METHOD FOR CASH RECONCILIATION

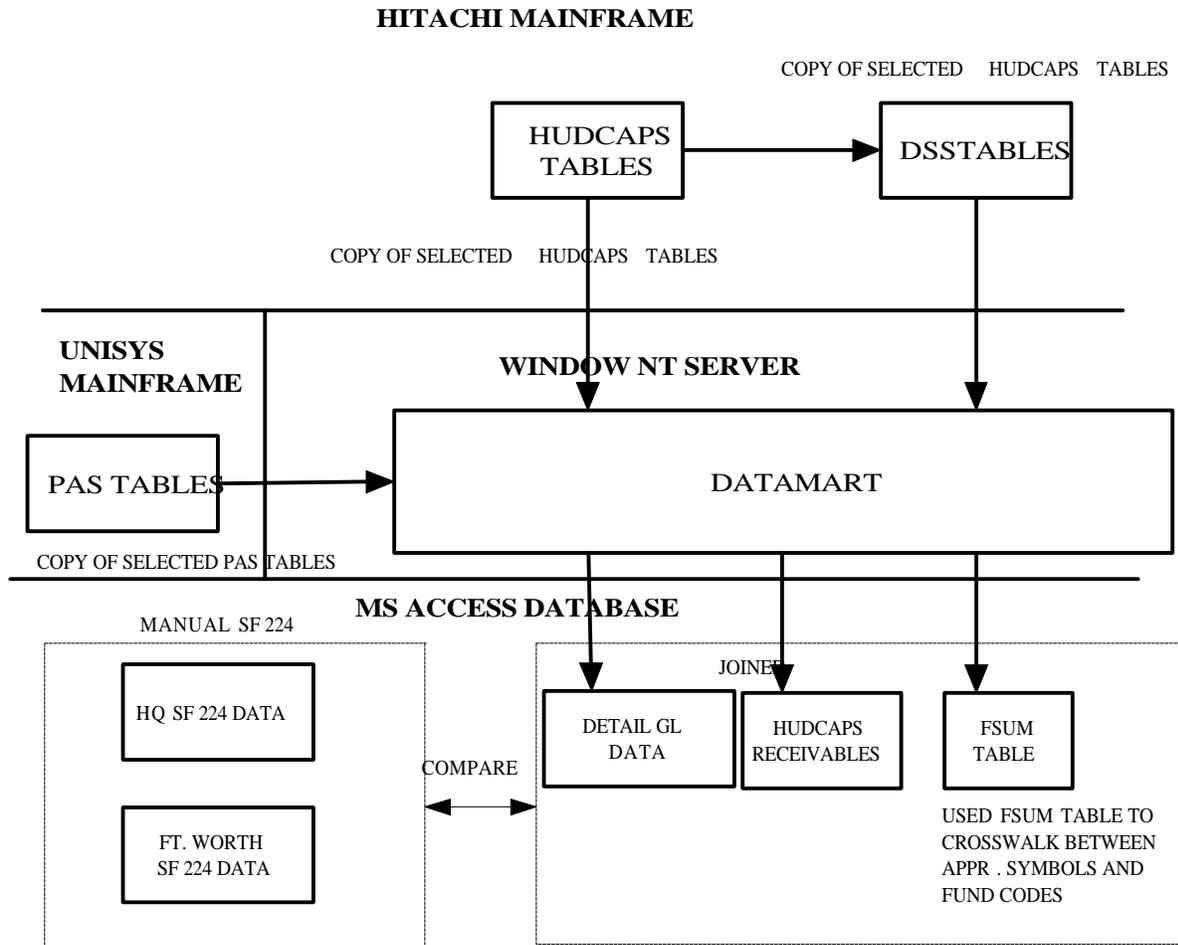


Chart 1

As shown above, the MS Access Database contains the detail general ledger data, HUDCAPS receivables, and the Fund Summary Group Definition (FSUM) Table which were obtained from the Data Mart. The Data Mart consists of selected HUDCAPS, DSS and PAS tables. The HUDCAPS receivables data is then joined with the detail general ledger data. HUD also used the FSUM Table to provide a crosswalk between appropriation symbols and fund codes. The last step in the process was to compare and reconcile the data from the Headquarters' and Ft. Worth's manually prepared SF-224s with the data in the MS Access database.

HUDCAPS can be used more directly and efficiently to obtain the necessary data for reconciliation and reporting purposes

The contractor prepared methodology requires the extraction and joining of data from several sources into a usable format. Additionally, the data from the manually prepared SF-224 is then compared to these files. We believe this is an inefficient and unnecessary process and prone to data errors and/or omissions. A more efficient methodology would be to use the automated SF-224 function in HUDCAPS as the source for the needed information. The use of this feature would reduce the risk of data errors and omissions from manual procedures.

As part of our audit, we traced transactions through the PAS to HUDCAPS interface to determine whether HUDCAPS could be relied on to provide complete and accurate data. We found that HUDCAPS has an audit trail for all transactions affecting the Treasury funds (SF-224 transactions). These transactions are a subset of the General Journal (GENJ) file. HUDCAPS has a capability of extracting all the transactions that affect cash in the automated SF-224. Chart 2 below describes the method to extract this information directly from HUDCAPS.

EFFICIENT WAY TO OBTAIN HUDCAPS DETAIL SF-224 TRANSACTIONS

HITACHI MAINFRAME

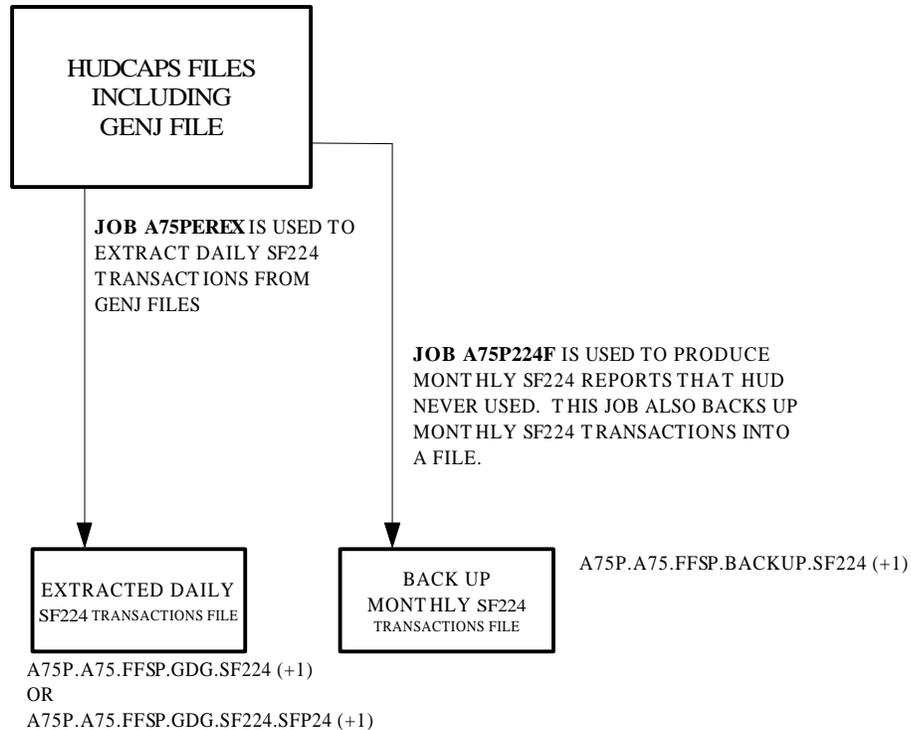


Chart 2

The chart shows that HUDCAPS has two automated jobs which can extract SF-224 transactions and produce SF-224 reports. These SF-224 transactions in HUDCAPS can be used by the OCFO to perform (1) the monthly cash reconciliation, as well as, (2) daily on-line research and reporting work. Accordingly, if HUD uses the functionality already in HUDCAPS to extract the transactions and to prepare the SF-224 report, there would be no need for the manually-intensive cash reconciliation process developed by the contractor. The funds used to invest in the contractor developed methodology were not cost effective and could have been put to better use.

The OCFO agreed that the HUDCAPS automated SF-224 should be used. The OCFO advised the OIG that it had initiated action to convert to an automated SF-224 through HUDCAPS and in July 2000 began a testing phase in

anticipation of preparing the SF-224 from HUDCAPS. However, the U.S. Department of the Treasury will not be prepared to receive the automated SF-224 information directly from HUDCAPS until early 2001.

Auditee Comments

The OCFO provided written response to our draft audit report on December 28, 2000. The OCFO's response included both summary and detailed comments. The OCFO's full response is included in Appendix B. The summary comments for Finding 3 are provided below.

The OIG finding on cash reconciliations misrepresents the events and corrective actions taken by the OCFO to provide effective, timely, and efficient reporting of cash transactions and reconciliations. The OCFO proactively initiated a corrective action plan in April 2000 to improve reporting of cash transactions and reconciliations. Because all monthly activity could not post in time to the HUDCAPS SF-224, the OCFO initiated actions to correct HUDCAPS records and automate the process for preparing the SF-224 from HUDCAPS. The automated SF-224 process has been developed and tested. However, implementation has been delayed until January 2001 because the Department of the Treasury will not be ready to accept electronic transmissions until then.

**OIG Evaluation of
Auditee Comments**

We have not misrepresented the events and corrective actions taken by the OCFO to address the finding on cash reconciliation. While we recognize that the OCFO has been working on the cash reconciliation problem, the OCFO could have resolved this problem much earlier. The primary reason OCFO was not using the HUDCAPS SF-224 was because the OCFO had not changed their business practices in anticipation of the HUDCAPS conversion to HUD's official general ledger for FY 1999. Prior to the conversion, the OCFO was preparing the SF-224 manually. However, this manual process continued months after HUDCAPS became HUD's official general ledger even though the automated SF-224 function in HUDCAPS was available for use.

We have modified the report as appropriate based on the OCFO comments. Appendix B contains the OCFO's comments to the draft report. Appendix C contains a detailed evaluation of the OCFO's comments

Recommendations

We recommend that the Office of the Chief Financial Officer:

- 3A. Utilize and extract SF-224 data from the HUDCAPS general ledger to assist HUD's monthly cash reconciliation and verification process instead of relying on the contractor developed methodology. Additionally, formal policies and procedures need to be established for the reconciliation process, to include the methodology for using and extracting SF-224 from the HUDCAPS general ledger.
- 3B. Implement the automated SF-224 function in HUDCAPS for the SF-224 report preparation process and establish formal policies and procedures for this process.

(THIS PAGE LEFT BLANK INTENTIONALLY)

Management Controls

In planning and performing our audit, we considered the management controls over HUD's HUDCAPS in order to determine our auditing procedures, not to provide assurance on the controls. Management controls include the plan of organization, methods and procedures adopted by management to ensure that its goals are met. Management controls include the processes for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance.

Relevant Management Controls

We determined the following management controls were relevant to our audit objectives:

- Validity and Reliability of Data - Policies and procedures that management has implemented to reasonably ensure that valid and reliable data are obtained, maintained, and fairly disclosed in reports.
- Safeguarding Resources - Policies and procedures that management has implemented to reasonably ensure that resources are safeguarded against waste, loss, and misuse.

We assessed all of the relevant controls identified above.

It is a significant weakness if management controls do not provide reasonable assurance that the process for planning, organizing, directing, and controlling program operations will meet an organization's objectives.

Significant Weaknesses

Based on our review, we believe the following items are significant weaknesses:

Validity and Reliability of Data

HUDCAPS is not being adequately maintained; inadequate controls exist over the integrity of HUDCAPS data; and the Office of the Chief Financial Officer is not fully utilizing HUDCAPS for their financial data reconciliation and verification purposes (See Findings 1, 2, and 3).

Safeguarding Resources

Inadequate access controls exist over HUDCAPS data and the configuration management process (See Finding 1).

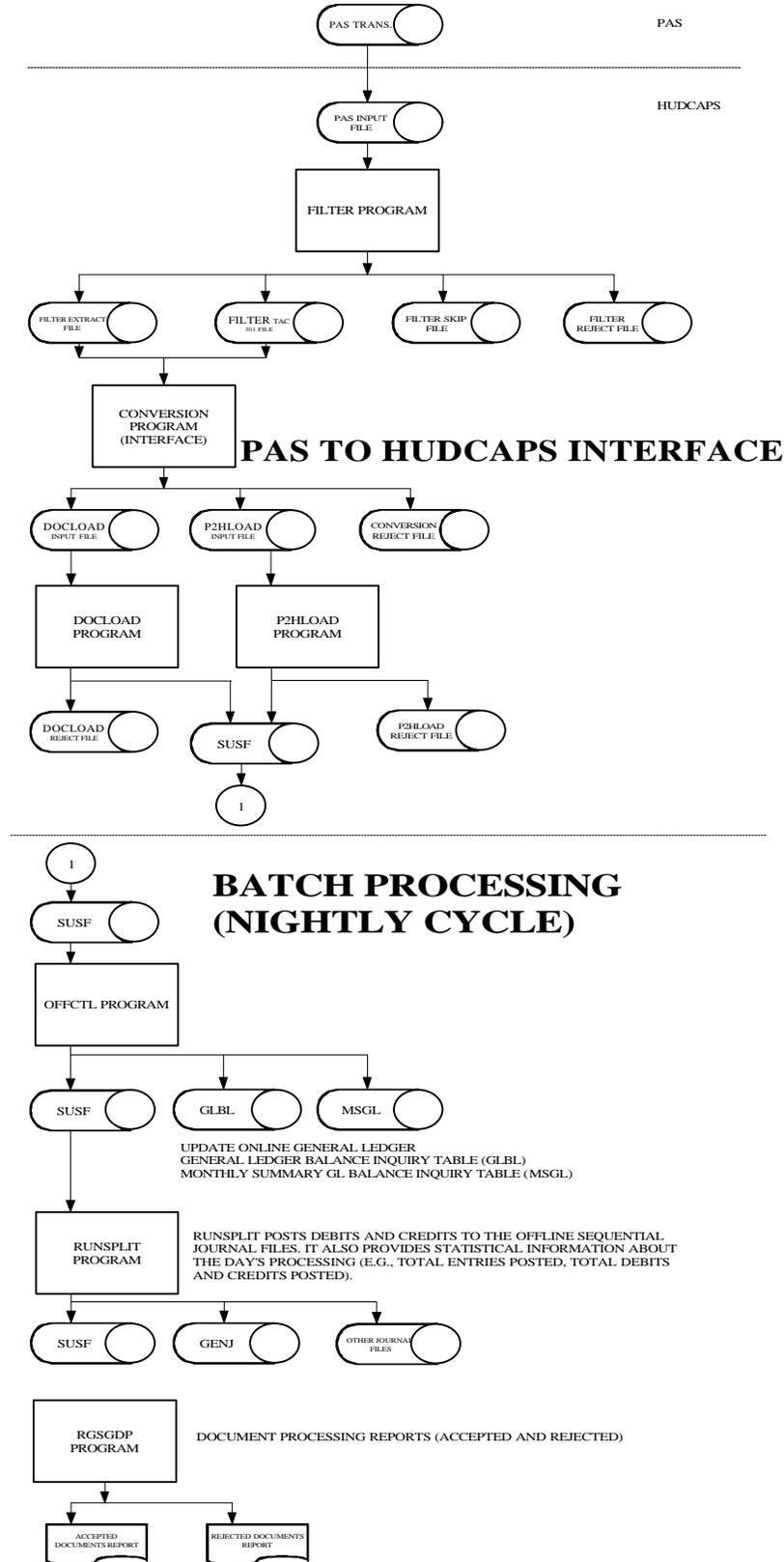
(THIS PAGE LEFT BLANK INTENTIONALLY)

Follow Up On Prior Audits

Our review was initiated based on the results of the OIG's audit of HUD's FY 1999 Financial Statements (00-FO-177-0003, dated March 1, 2000). However, our review also focused on internal control areas related to access security and configuration management where weaknesses were found based on work performed on previous financial statements audits (99-FO-177-0003, 98-FO-177-0004). We found that internal control weaknesses still exist in the security access and configuration management areas, which we have addressed in Finding 1.

(THIS PAGE LEFT BLANK INTENTIONALLY)

PAS to HUDCAPS Interface and Batch Processing Flowchart



(THIS PAGE LEFT BLANK INTENTIONALLY)



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, D.C. 20410-3000

OFFICE OF THE CHIEF FINANCIAL OFFICER

DEC 28 2000

MEMORANDUM FOR: Benjamin K. Hsiao, Director, Information Systems Audit
Division, GAA

FROM: Victoria L. Bateman, Deputy Chief Financial Officer, F

SUBJECT: Draft Audit Report on HUD's Central Accounting and Program
System

This provides a formal response to the findings and recommendations of the subject draft audit report, as requested in your memorandum dated November 30, 2000. The audit, initiated March 2000, was to assist management in correcting control weaknesses and conversion problems with HUD's core financial management system (HUDCAPS) as noted in the Fiscal Year (FY) 1999 Financial Statements Audit.

The report conclusions do not accurately reflect the corrective actions taken by the Office of the Chief Financial Officer (OCFO). The frequent dialogue between the Office of the Inspector General (OIG) and the OCFO since the FY 1999 financial statements audit and during the course of the HUDCAPS audit enabled OCFO staff to resolve many of the reported control weaknesses during the audit. However, we found that substantive progress in completing corrective actions by OCFO received minor presentation in the draft audit report. In some cases, the auditors did not perform due professional care in following up on the status of a finding prior to the end of field work. Specifically, the draft audit report contained:

- lengthy descriptions of reported weaknesses without acknowledgment that corrective actions were completed prior to the audit being completed,
- captions and headings which were not supported by specific conclusions in the report, and
- unclear criteria with which to support findings.

Finding 1, HUDCAPS is not Adequately Maintained. The significance of this finding is overstated because corrective actions have been completed on three of the four subfindings. OCFO with IT support completed corrective actions on configuration management in December 2000, on access controls in July 2000, and on the problem resolution process by about June 2000.

In the area of configuration management (CM), the draft audit report fails to recognize that HUDCAPS was the furthest along of any major system in being fully implemented under CM. OCFO made a prudent management decision to postpone implementation of full configuration management until after year-end closing of HUDCAPS for FY 2000, rather than introduce technical risks into the critical annual close process. The December 2000 target date was accomplished.

Finding 2, Inadequate Controls over HUDCAPS Data Reliability. Most of the subfindings were based on field work conducted in March and April 2000. However, the auditors did not perform due professional care in following up on the status of the finding prior to the end of field work (i.e., October 2000). In fact, most the corrective actions had been completed during the period of May to October 2000.

In the area of control over the software utility UTTCOR, the audit report failed to clearly recognize that access to the UTTCOR had been restricted to a few individuals, and that responsibility for execution of the utility had been transferred from development contractors to production control contractors in November 2000.

Finding 3, CFO is Underutilizing HUDCAPS for the Cash Reconciliation Process. The OIG finding on cash reconciliations misrepresents the events and corrective actions taken by OCFO to provide effective, timely, and efficient reporting of cash transactions and reconciliations. The OCFO proactively initiated a corrective action plan in April 2000 to improve reporting of cash transactions and reconciliations. Because all monthly activity could not post in time to the HUDCAPS SF-224, the OCFO elected to establish interim cash reconciliation procedures. Concurrently, OCFO initiated actions to correct HUDCAPS records and automate the process for preparing the SF-224 from HUDCAPS. The automated SF-224 process has been developed and tested. However, implementation has been delayed until January 2001 because the Department of the Treasury will not be ready to accept electronic transmissions until then.

Attachment 1 contains a summary of our comments to the draft report. More detailed comments on the findings and recommendations can be found in Attachment 2. Although our comments criticized the report for the lack of sufficient recognition for corrective actions taken to its findings, we did appreciate your comment that HUDCAPS could be a reliable financial management system if HUD corrects the reported deficiencies.

If you have any questions, please contact Gail B. Dise, Director, Financial Systems Maintenance and Development Division, on 202-708-1757, extension 3749.

Attachments

**Summary Comments to
OIG Draft Audit Report on HUDCAPS dated November 30, 2000**

Sub-Finding Number	Finding	Summary Response
1.	HUDCAPS Is Not Adequately Maintained	
1A.	Configuration Management has not been fully implemented for HUDCAPS	<ul style="list-style-type: none"> · The configuration management issue was completed December 16, 2000 with the first HUDCAPS software release under full Endeavor control. · OCFO management made prudent management decision to postpone full Endeavor implementation until after year-end close so as not to risk occurrence of IT-related problem. · Draft audit report does not present management's explanation of the decision to delay implementation of configuration management, as required by government auditing standards.
1B.	Access Controls for System Maintenance Were Inadequate	<ul style="list-style-type: none"> · Corrective actions on the access controls issue were completed in July 2000.
1C.	There Are A Number of Weaknesses in the HUDCAPS Data Restoration and Backup Process	<ul style="list-style-type: none"> · Auditing standards require testing of Contingency Plans every year or two. Report's finding does not identify any criteria for testing an individual application system annually.
1D.	HUDCAPS Problem Resolution Process Resolving System and User Problems in a Timely Manner was Ineffective	<ul style="list-style-type: none"> · Corrective actions on the Problem Resolution Process were completed by about June 2000. · Report acknowledged OCFO actions to correct weakness.

2.	Inadequate Controls Over HUDCAPS Data Reliability	
2A.	DSS Data are not Reconciled with the HUDCAPS Production Data	<ul style="list-style-type: none"> · HUD implemented reconciliation procedures between DSS and HUDCAPS data during audit, as acknowledged in audit report. · Report makes no recommendations regarding this weakness.
2B.	Control Over User of UTTCOR Utility Needs Further Strengthening	<ul style="list-style-type: none"> · OCFO completed corrective action on this weakness on November 8, 2000, when responsibility for executing UTTCOR was transferred to IT production control staff. · Audit report does not acknowledge completed corrective action.
2C.	Rejected Transactions in the SUSF File are not Timely Resolved	<ul style="list-style-type: none"> · OCFO completed corrective actions n May 2000. · PAS-to-HUDCAPS interface errors are reviewed daily. · At close of FY 2000, there were less than 100 rejected documents older than October 1, 1999 in the SUSF file. · OCFO disagrees with recommendation to purge SUSF transactions any more frequently than annually. Transactions may represent financial activity which has already occurred. Transaction acceptance is the responsibility of the user. · OCFO disagrees with recommendation to provide monthly reports of information that is readily available on-line, real-time to program offices.
2D.	PAS to HUDCAPS Interface Posting Model not Timely Updated	<ul style="list-style-type: none"> · OCFO maintains that finding was caused by timing difference between the printing and delivery of a report of the posting model and the actual review of system data by the auditors after updates had occurred. · OCFO disagrees with a recommendation for

		a non-problem.
2E.	Fund Accounts in HUDCAPS General Ledger have not been Updated to Reflect Legislative Changes	<ul style="list-style-type: none"> · Finding is inaccurate. HUDCAPS was modified before the closing of the FY 2000 books to properly reflect legislated changes pursuant to the FY 2000 HUD Appropriations Act. · Report reflects a lack of understanding of the complexities of appropriation transfer tasks, and the time it takes to plan, test and implement a large conversion.
2F.	Fund Conversion of PAS to HUDCAPS Interface is Incomplete	<ul style="list-style-type: none"> · Transactions for Funds 4098 and 4015 are entered directly into the HUDCAPS general ledger, therefore, HUDCAPS can be relied upon for financial reporting and reconciliation purposes. · Use of memorandum accounts for Fund 0148 and the three X funds was not a “posting error”, but rather an appropriate internal control over a complex interface.
3.	CFO is Underutilizing HUDCAPS for the Cash Reconciliation Process	
3A.	Contractor Developed Cash Reconciliation Methodology is Inefficient and Error Prone	<ul style="list-style-type: none"> · OCFO’s cash reconciliation process was developed with the understanding that all monthly activity may not post in time to the HUDCAPS SF-224, and therefore, an interim process outside of HUDCAPS would be required to consolidate the pieces for analysis. · We disagree that the interim process was inefficient. However, it was the best alternative to provide for timely corrective action to resolve cash reconciliation problem.

**Detailed Comments to
OIG Draft Audit Report on HUDCAPS dated November 30, 2000**

Comment Number	Reference	Management Comments for OIG Consideration
General Comments		
1	Cover Letter, Executive Summary, Introduction	<p>Over the past eight months, the Office of the Chief Financial Officer (OCFO) has implemented significant improvements in financial management. HUD has implemented most of the OIG's recommendations and eliminated most of the material weaknesses and reportable conditions related to HUDCAPS from the FY 1999 Financial Statement Audit. In addition, HUD has brought HUDCAPS into substantial compliance with JFMIP requirements and has developed a vision for future financial management improvements. While we recognize that additional improvements are needed, these accomplishments need to be recognized in the cover letter and the Executive Summary in order to provide balance to the report.</p> <p>The General Accounting Office's <i>Government Auditing Standards</i>, commonly referred to as the "Yellow Book", requires that: "Noteworthy management accomplishments identified during the audit, which were within the scope of the audit, should be included in the audit report along with deficiencies." (Section 7.43). In addition, the cover letter and Executive Summary need to recognize that actions have been completed several months before the completion of field work on most of the findings in this report.</p> <p>Throughout most of the findings and subfindings, the report is very non-specific about criteria. "General criteria" was provided in the Introduction, but there was very little reference to specific criteria in the reported findings and subfindings. In order to meet the objective of the audit (i.e., determine adequacy of controls) it is important to have a measuring stick to conclude on the significance of the finding other than the auditor's judgment. That measuring stick would normally be criteria. In addition, the "Yellow Book" states that: "...auditors should identify at least the condition, criteria, and possible asserted effect to provide sufficient information to federal, state, and local officials to permit them to determine the effect and cause in order to take prompt and proper corrective action." (See Section 5.19 of the "Yellow Book".)</p>

2	Cover Letter, Paragraph 3, and, Page ii, Paragraph 3	We disagree with the statements that the internal control weaknesses are "significant". All of the findings alluded to potential effects. In those cases where there were actual effects noted, they were immaterial. In addition, actions had been completed on most of the findings months before the end of the fieldwork, and thus the word "significant", clearly does not apply. That should be recognized in the cover letter and the Executive Summary. The cover letter should also include a summary of comments by management officials.
3	Throughout	The audit report should reference the Office of the Chief Financial Officer (OCFO), not the Chief Financial Officer.
Finding 1, HUDCAPS is not Adequately Maintained.		
4	Page ii, Paragraph 4	Paragraph states that "Implementation of configuration management (CM) for HUDCAPS has been continuously delayed." OCFO made a prudent management decision to postpone implementation of full configuration management until December 2000, after a successful year-end closing of HUDCAPS for FY 2000, rather than introduce technical risks into the critical annual close process. Further, the draft report does not acknowledge that HUDCAPS was the furthest along of any major system in being fully implemented under CM and that OCFO was fully committed to completing the implementation which has now occurred, as of December 2000.
5	Page ii, Paragraph 5	This deficiency is not a "maintenance practice", it is a "service continuity" issue. (See Federal Information Systems Controls Manual—i.e., FISCAM—Section SC-4.)
6	Page ii, Paragraph 6	As identified in the report, HUD has completed corrective actions on the Problem Resolution issue, which should be recognized in this paragraph.
7	Page 3, Title	The title is misleading. It is not consistent with what was reported in the summary and the body of the report. We suggest the following title: "HUDCAPS Configuration Management has improved, however, additional progress is needed".
8	Page 3, Paragraph 1	<p>The last sentence should recognize that most, if not all, of the deficiencies have been corrected in order to be consistent with the body of the report. The ENDEVOR setup to provide full configuration management control of HUDCAPS has been system tested and undergone IV&V testing. By December 2000, HUDCAPS met the CM implementation plan milestones and was completely under CM control. Future updates and releases of</p> <p>HUDCAPS will be implemented under the control of ENDEVOR, including changes to source code, compilations, and migration among</p>

		environments, including from test to production.
9	Page 3, Paragraph 4	Another sentence needs to be added at the end of that paragraph (continues on Page 4): “Endeavor implementation was completed in December 2000.”
10	Page 4, Paragraph 4	The statement that “... the bind process... is not controlled under Endeavor” is not accurate. The current ENDEVOR configuration establishes the bind process under automated control. Although the actual bind occurs on the destination machine (not the machine on which ENDEVOR operates), the job that performs the bind is controlled by ENDEVOR and prevents linking an incorrect plan to the application program.
11	Page 5, Paragraph 1	The draft report states that “Although the target date was originally scheduled for the end of September 2000, the implementation date has been delayed to the end of December 2000”. The date change resulted from a joint OCFO/IT management decision to reduce the risk of an IT-related problem during the critical annual close process. The December 2000 target date to implement full configuration management in HUDCAPS has been met. In addition, there is no discussion about why management delayed the implementation to the end of December 2000. According to “Yellow Book” standards: “In describing shortcomings in performance, auditors should present an explanation of responsible officials including the consideration of any unusual difficulties or circumstances they faced.” (See Section 7.58 of the “Yellow Book”.)
12	Page 6, Paragraph 1	If the OCFO has taken care of the weakness, what additional action is needed. If actions were taken back in June and July, why is this still a finding?
13	Page 6, Subtitle	We suggest that the word, “Number” in the subtitle be changed to “Few” or “Couple”. There were only two weakness issues discussed in this subfinding: lack of procedures, and testing.
14	Page 6, Paragraph 3	The HUD BRP Plan (Contingency Plan), which includes HUDCAPS, is tested annually. What are the specific criteria for individually testing each application again? GAO’s Federal Information Systems Controls Manual (FISCAM, Section SC-4) requires testing of the Contingency Plans every year or two. However, there is no requirement for testing each individual application.
15	Page 7, Paragraph 1	Again, there is no explanation from responsible officials in accordance with “Yellow Book Standards”. Was this brought to the attention of the OCFO at the time of the finding and was the OCFO given an opportunity to comment on what actions the OCFO might take? Have any actions taken place regarding this finding?

16	Page 7, Subfinding	The subfinding entitled “HUDCAPS Problem Resolution Process Resolving System and User Problems in a Timely Manner Was Ineffective.” should be changed to "HUDCAPS Problem Resolution Did Not Have Formal Prioritization Process." Procedures to prioritize and assign resources and established timeframes to resolve STARS have been effective. The number of outstanding system and user problems has been reduced significantly and the time to resolve those issues has also declined. The auditors made no recommendations to address this "weakness".
17	Page 7, Side-Caption	"Problem resolution was ineffective" should be changed to "Problem resolution benefitted from formal prioritization process."
18	Page 7, Paragraph 3, Last sentence	The last sentence discussing the “critical problems” is vague. In order for us to get a better perspective on the extent and significance of this finding, can we get some examples of the critical problems and the length of the “extensive period of time”. “Yellow Book” standards state that “Giving readers an adequate and correct understanding means providing perspective on the extent and significance of the reported findings....” (See Section 7.52.).
19	Page 7, Paragraph 4	This paragraph talks about problems found in March 2000. The report needs to recognize the status in October 2000 when the field work was completed.
20	Page 7, Paragraph 5	The date that the OCFO established procedures should be provided. Also, the word, “appeared” is non-committal and the conclusion is left to be inferred by the reader. The report should state that the procedures are either adequate or not adequate. If not adequate, reasons should be provided. The “Yellow Book” requires that: “Conclusions should be specified and not left to be inferred by readers.” (See Section 7.20 of the “Yellow Book”.)
21	Page 8, 1A.	HUD implemented its first full configuration management of HUDCAPS under Endeavor on December 16, 2000. Although the actual bind occurs on the destination machine (not the machine on which ENDEVOR operates), the job that performs the bind is controlled by ENDEVOR and prevents linking an incorrect plan to the application program.
22	Page 8, 1B.	Only the designated configuration management administrators and backups will be approved to promote/move a release to the next environment, e.g., development-to-test, and test-to-production. Developers will not be granted access.
23	Page 8, 1F.	What does “administration recovery procedures” mean? It is not discussed in the report.

Finding 2, Inadequate Controls Over HUDCAPS Data Reliability		
24	Page iii, Paragraph 1	The draft report stated that "the Decision Support System (DSS) was not periodically reconciled with the data in the HUDCAPS production tables." The statement is not accurate. The DSS data was reconciled daily by record count. In addition, to put this finding into perspective, the importance of DSS as it relates to the financial statements should be discussed.
25	Page iii, Paragraph 2	On Page 11, the report recognizes that HUD has taken several actions to improve controls over the use of UTTCOR. This should also be recognized in the Executive Summary.
26	Page iii, Paragraph 3	Throughout the document, OIG has misstated the status of PAS-to-HUDCAPS posting models. OIG's issue was caused by review of reference documentation whose source data in HUDCAPS had changed since the documentation was printed. When the auditors viewed HUDCAPS they noted posting differences between the documentation and HUDCAPS data, and cited possible "erroneous postings".
27	Page iii, Paragraph 4	<p>The report states that "a fourth deficiency is that HUDCAPS has not been updated to reflect legislated changes." The statement is incorrect. HUDCAPS was modified before the closing of the books to properly reflect legislated changes pursuant to the FY 2000 HUD Appropriations Act.</p> <p>There is no support in the draft report that transactions for Fund 0148 and the three no-year funds have not correctly posted to the general ledger, therefore, reference to "HUD program managers could not rely on HUDCAPS for fund control purposes" is incorrect.</p> <p>As a general comment, statements in the draft report regarding HUDCAPS and the timing of the appropriations conversion reflect a lack of understanding of HUDCAPS and the time it takes to plan, test, and implement a large conversion. Regarding references on Page 17, the OCFO "practice" is to perform appropriations transfers as early as possible. With large and complex transfers such as those required in 1998 and 2000, it takes most of the fiscal year to prepare for execution of the transfer, which includes development of supporting software.</p>
28	Page iii, Paragraph 5	The sentences in this paragraph that relate to the deficiencies described in the previous paragraphs should be integrated into those paragraphs. The reader should be told that all the deficiencies have been resolved before the end of the page.

		The statement in reference to cash reconciliation that “This investment was neither cost effective nor efficient”, should not be made since there is no support for this in the body of the report.
29	Page 9, Finding	<p>The finding is not accurate. The finding indicates that there are inadequate controls over HUDCAPS data reliability, however, the finding explained on Page 10 states “Without periodic reconciliation, there is no assurance that the data in DSS is accurate and complete”. This statement concludes that DSS might not be accurate but does not discuss whether HUDCAPS is inaccurate.</p> <p>As a general comment, most of the subfindings were based on field work conducted in March and April 2000. However, the auditors did not perform due professional care in following up on the status of the finding prior to the end of fieldwork (i.e., October 2000). In fact, corrective action had been completed for many of the issues during the period of May to October 2000. The “Yellow Book” requires that auditors appropriately issue reports to make the information available for timely use by management...” It further states that a carefully prepared report may be of little value to decision-makers if it arrives too late. (See Section 7.6 and 7.7.)</p>
30	Page 9, First Subfinding	The subfinding should be in past tense, to reflect implementation of a monthly DSS-to-HUDCAPS data comparison process.
31	Page 9, Paragraph 2	Please clarify how the data reliability of HUDCAPS was reduced because of the weak controls. Can you provide examples of data reliability problems? Also, if DSS reports were not used, what was used?
32	Page 9, Paragraph 3	The wording, “...producing data to other HUD systems” is not clear—may be missing a word.
33	Page 10, Paragraph 1	The first sentence that "CFO did not establish procedures to reconcile data in DSS with HUDCAPS production data ..." is contradicted by the Paragraph 3 that says HUD established a process to validate the DSS against HUDCAPS production data.. The report should state whether the process was established or not. If the process was established in May 2000, the auditors had plenty of time to verify that the process was in place. According to the report the field work was not completed until October 2000.
34	Page 11, First Subfinding	OCFO completed corrective action as of November 8, 2000. Responsibility for executing UTTCOR was transferred from American Management Systems (AMS) to Lockheed Martin Production Control. On November 8, 2000, the first UTTCOR was successfully executed against the HUDCAPS production application following the new procedures defined in AMS's memorandum to HUD, <i>TO11-1109, Updated Procedures for use of HUDCAPS Utility Table Update (UTTCOR) Version 2, dated November 1, 2000.</i>

		<p>The issue that existed was with who had access to execute jobs that could update the HUDCAPS database. We disagree with the wording “uncontrolled”. Not all controls are system controls. OCFO is unaware of data being corrupted or unauthorized changes made. There are records of the data before and after the process which could be examined by other parties.</p> <p>The draft report failed to mention that there were manual procedures in place to manage UTTCOR use. We use an MS <i>Access</i> database for tracking the UTTCOR requests fulfilled at the request of OCFO. The purpose of the database is to provide a means for recording the audit trail, such as signoffs of authorization to execute UTTCOR.</p>
35	Page 11, Second Subfinding	<p>The subfinding should be in past tense. This finding has been resolved for almost 6 months. As of FY 2000 year end, there were no records on the SUSF relating to FY 2000 activity in PAS. The report should recognize that corrective actions have been completed on this finding and there no longer is a problem.</p> <p>For example, prior to May 2000, analysis of data resident in the SUSF file was almost impossible. The OCFO had to rely solely on screen-prints of HUDCAPS views of the SUSF in order to determine what information was in the SUSF. In May 2000, the OCFO modified HUDCAPS to extract information from the SUSF on a nightly basis and deliver this information to the CFO Data Mart. OCFO developed a variety of reports from the Data Mart SUSF file and have used these reports to assist in managing the contents of the SUSF. Since that time we have made great strides toward identifying records on the SUSF which require action, especially those relating to the PAS/HUDCAPS interface.</p>
36	Page 12, Paragraph 3	<p>The statement that approximately 25 percent (of the 2%) of the PAS to HUDCAPS interface rejected transactions in the SUSF (back in early April) had not been reconciled within 3 months is false. A fairer statement is that the problems preventing those transactions from posting had not been resolved. The 2% of transactions on SUSF from the PAS to HUDCAPS interface are valid transactions, posted to the PAS subsidiary and thus are important to get posted to HUDCAPS general ledger and resolving the problems preventing that posting was a OCFO priority. NOTE: Prior to fiscal year end closing, there were no SUSF records from PAS unprocessed.</p> <p>The on-line transactions are the responsibility of the office and staff who entered them. The 5-year-old item is “stuck” as are several other old documents and no one can delete. What does IG recommend since the draft recommendations will not work?</p>

37	Page 13, Paragraph 1	<p>Remove reference to "AMS", and direct findings and recommendation to HUD organizations.</p> <p>The OCFO did not direct AMS to develop an enhancement to automate the reconciliation process for transactions in the SUSF. What OCFO directed AMS to develop was extract files from the SUSF which are loaded each night into the CFO Data Mart for analysis the following day.</p>
38	Page 14, from Paragraph 1 on Page 13	<p>Last sentence states "Any rejected transaction remaining at the end of the fiscal year would be deleted". The OCFO does not delete any rejected transaction on the SUSF at fiscal year end. This would not be a prudent action since many of these transactions may be required to post activity which has already occurred. It is the user's responsibility to ensure that transactions entered are accepted by HUDCAPS or if no longer needed, are deleted from the SUSF.</p>
39	Page 14, Paragraph 2	<p>The report states "With respect to the PAS-to-HUDCAPS interface, there should be a policy that rejected transactions be resolved and cleared from the SUSF on a monthly basis. ... The rejected transactions, if not timely resolved, could significantly affect the accuracy of the financial data in the general ledger." Efforts to keep the SUSF at a manageable level by resolving interface rejections occur on a daily basis. On an average day, PAS sends over 3,500 transactions to HUDCAPS. However, on April 7, 2000 (the day before the OIG took the sample), PAS had closed for the month of March and transmitted 26,447 transactions over to HUDCAPS. On April 8, 2000 SUSF contained 141 rejected transactions from the PAS-to-HUDCAPS interface. This equates to about 1/2 of 1% of one day's activity rejected.</p>
40	Page 15, Paragraph 1	<p>The report states "These discrepancies could be the result of either out-of-date documentation or erroneous postings. In either case, the CFO cannot be assured that all transactions have been accurately recorded in the general ledger." OIG's issue was caused by review of reference documentation whose source data in HUDCAPS had changed since the documentation was printed. When the auditors viewed HUDCAPS they noted posting differences between the documentation and HUDCAPS data, and cited possible "erroneous postings". OCFO is confident that transactions are being properly recorded in the general ledger</p>
41	Page 17, Paragraph 2	<p>The "practice" is to perform any legislated appropriation transfers as timely as possible after the precise details of the transfers can be ascertained, and the necessary software can be tested and executed. In Fiscal Year 2000 this did not occur until late in the fiscal year.</p>
42	Page 18, Paragraph 2	<p>First sentence should read, "Beginning FY 1999, HUDCAPS was considered HUD's official Department wide general ledger for all HUD accounts except for Fund 0148. The official FY 1999 general ledger for Fund 0148 remained in PAS with interface to CRS and Hyperion for</p>

		consolidated statements.” OCFO identified the Fund 0148 conversion as part of the OMB 300B plan and it was completed in FY 2000.
43	Page 18, Paragraph 3	<p>The OCFO recognizes that transactions under Funds 0148, 4098, and 4015 were not being entered into HUDCAPS via the PAS Interface. These funds were not supported by PAS in ways comparable to all the other funds converted to HUDCAPS beginning in FY 1999, therefore it was a strategic move to postpone the conversion of these funds so as to not affect the conversion of all other funds in PAS. Transactions recording the accounting activity for these funds are entered directly into HUDCAPS, thereby allowing for the consolidation of this activity with all other Departmental financial activity in both HUDCAPS and Hyperion.</p> <p>Fund 0148 was a hybrid of four components. Only one of the four components used PAS/LOCCS. The other three components consisted of monthly summary postings to the PAS G/L with the subsidiaries residing outside of PAS. It is because of this that HUD could not use the PAS-to-HUDCAPS interface to record payment/collection activity for the appropriation in its entirety. For the one component for which PAS/LOCCS was being utilized, effective August 2000, HUD began to send activity through the PAS-to-HUDCAPS interface.</p>
44	Page 18, Paragraph 4	<p>OIG questioned the OCFO usage of memo accounts as an internal control over a complex interface. Posting to those accounts was not intended to replace postings to the appropriate asset and liability accounts which was occurring concurrently albeit not through the interface. Calling them posting errors is a misstatement. The posting occurred as intended for internal control purpose.</p> <p>Further, stating that HUDCAPS cannot be relied upon for financial reporting and reconciliation purposes for the 0148 and the three X funds because all G/L entries do not come through the PAS interface is again a misstatement. Since financial reporting and reconciliation is based on trial balances, if the G/L is maintained (and its maintenance is not in scope of this report), HUDCAPS can be relied upon. However, we do agree that the PAS-to-HUDCAPS interface should be used to the maximum extent possible and support that recommendation. OCFO will continue efforts to include, where possible, the remaining transactions for these funds as part of the PAS/HUDCAPS interface.</p>
45	Page 20, 2A	Full configuration management control for HUDCAPS was implemented on December 16, 2000.
46	Page 20, 2B	Management of SUSF rejects by program offices does not require a report. They have on-line access. As long as they know OCFO is charged with doing periodic deletes, there is no incentive to manage the process.
47	Page 20, 2C	OCFO does a periodic purge. We disagree with requiring that a purge be

		more frequent than once a year, or that we delete records within the fiscal year of the purge. In addition, without writing special software there are old actions on SUSF that are “stuck”, and no one including the system administrators is able to delete. At the close of FY 2000, there were less than 100 documents older than October 1, 1999.
48	Page 20, 2D	Our “policy” is to analyze and resolve PAS-to-HUDCAPS rejected transactions on a daily basis. If any problem requires more time and analysis, HUD issues a high priority problem ticket (STAR), and schedules the time and resources to address the problem. OCFO disagrees with an audit recommendation to do what we are already doing.
49	Page 20, 2E	This recommendation has already been implemented. This finding and recommendation are based on an OIG misunderstanding and misstatement of the status of PAS-to-HUDCAPS posting models. OIG’s issue was caused by review of reference documentation whose source data in HUDCAPS had changed since the documentation was printed. When the auditors viewed HUDCAPS they noted posting differences between the documentation and HUDCAPS data, and cited possible “erroneous postings”. OIG tested the data against an outdated hard copy. OCFO disagrees with a recommendation for a non-problem.
50	Page 20, 2F	Statements regarding HUDCAPS and the timing of the appropriations conversion reflect a lack of understanding of the complexities of the appropriations transfer task, and the time it takes to plan, test and implement a large conversion. It is not clear what the OIG means by detail transaction level.
51	Page 20, 2G	Suggest that 2G and 2H be combined into one recommendation. Disbursement activity for these funds will be automated to the extent possible.
52	Page 20, 2H	Recommend combining 2H with 2G.
Finding 3, CFO is Underutilizing HUDCAPS for the Reconciliation Process		
53	Page iii, Paragraph 6	There is no support for the statement that “ the investment was neither cost effective nor efficient” in the Executive Summary or in the body of the report. The report states that “The reconciliation procedures developed involve numerous manual steps that are inefficient and susceptible to data errors or emissions.” The report does not identify numerous manual steps or any specific data errors or emissions.
54	Page 21, Finding	This finding should be changed to “OCFO has Not Implemented the HUDCAPS Automated SF-224”.
55	Page 21, Paragraph 1	The audit report states that “HUD is using manually intensive and time consuming processes to reconcile its cash transactions to the Treasury records rather than using HUDCAPS, even though this system contains all of the needed data for reconciliation.” HUD’s current methodology for

		conducting cash reconciliation is seen as an interim measure. Following the release of the FY 1999 Audit Finding, OCFO took immediate steps to address issues raised. Contractor support was utilized to assist HUD in developing an MS <i>Access</i> comparison software to match HUDCAPS general ledger data with SF-224 data in order to identify differences. The current process was developed understanding that all monthly cash activity may not post in time to the HUDCAPS SF-224, and therefore, an interim process outside of HUDCAPS would be required to consolidate the pieces for analysis.
56	Page 21, Paragraph 4	The OIG finding on cash reconciliations misrepresents the events and corrective actions taken by OCFO to provide effective, timely, and efficient reporting of cash transactions and reconciliations. The OCFO proactively initiated a corrective action plan in April 2000 to improve reporting of cash transactions and reconciliations. Because HUDCAPS information was not complete the OCFO elected to establish interim cash reconciliation procedures while at the same time initiating actions to correct HUDCAPS records and automate the process for preparing the SF-224 from HUDCAPS.
57	Page 22, Paragraph 1	The statement that “The CFO’s office agreed with our position that the HUDCAPS automated SF-224 should be used” is inaccurate. The OCFO decided to utilize the HUDCAPS SF-224 prior to the recommendation of the OIG. The process of creating the SF-224 directly from HUDCAPS is virtually complete at this time. The automated HUDCAPS SF-224 has been reconciled to the PC-based report for the last several months. References to “PriceWaterhouse Coopers (PWC)” and the term “Contractor Developed” should be eliminated from the audit report.
58	Page 22, Paragraph 2	The current cash reconciliation process, which was developed in May 2000 by the OCFO, involves the extract, from the CFO Data Mart, of four data sets: 1) general journal, 2) SUSF, 3) FMC collections, and 4) accounts payable. In addition, a Fund Summary Group (FSUM) Table, which is used to consolidate HUDCAPS Fund Codes, is used. Also, an SF-224 file is extracted and used to compare activity to the other files. We agree that the interim cash reconciliation process is more manually intensive than automating the SF-224 preparation in HUDCAPS. However, we disagree that the interim process was inefficient. The interim process was the best alternative to provide for timely corrective action to resolve the cash reconciliation problem.
59	Page 23, Paragraph 1	Regarding the statements that “HUD uses an automated tool, Query Management Facility (QMF), to extract a HUDCAPS receivable report from data selected in the DSS module”, except for the <i>dBase</i> SF-224 activity, all data is provided from the CFO Data Mart. The DSS is not

<p>60</p>	<p>Page 24, Paragraph 1</p>	<p>utilized for cash reconciliation purposes.</p> <p>There is no support for the statement about the “... inefficient and unnecessary process and prone to data errors and/or omissions.” OCFO has taken the necessary steps to utilize the automated SF-224 function within HUDCAPS, however, this function does not provide all the necessary pieces required to perform a proper cash reconciliation. The SF-224 file will need to be supplemented, as is the current process, with the following: 1) FSUM Table, to consolidate Fund Codes in order to match general ledger trial balances which use the FSUM for consolidation and presentation, 2) SUSF extract, any cash related activity from PAS/LOCCS, present on the SUSF at point of SF-224 generation, will need to be included in order to reconcile to Treasury, 3) FMC Collections, for Deposit Ticket Numbers, and 4) Accounts Payable, in the event that schedules are not confirmed timely within HUDCAPS or LOCCS.</p> <p>In addition, utilizing only the HUDCAPS SF-224 output as the sole input for cash reconciliation as recommended, will not satisfy OCFO’s cash reconciliation requirements. OCFO’s monthly reconciliation procedure is to reconcile to both the general ledger and Treasury for cash activity and balance. This requires that Treasury warrants (which are not part of the SF-224 process) be included in the reconciliation. Without warrant activity OCFO would only be reconciling a subset of true cash activity.</p> <p>Further, currently the SF-224 is on a different cycle than the general ledger, and therefore, the general ledger cash activity may be different than the transactions in the SF-224 file. The extract from the general journal includes all cash activity for the period, (e.g., warrants, ECS payments, adjustments, and transfers) whereas the SF-224 file may only include disbursements and collections and does not include non-expenditure-type activity.</p>
<p>61</p>	<p>Page 25, Paragraph 1</p>	<p>The SF-224 file is not a cash reconciliation product. HUD has numerous funds to reconcile each month, and utilization of the output files generated by the SF-224 process, are not suitable to electronic reconciliation without additional investment in extract software, (e.g., conversion of packed numeric fields to unpacked).</p> <p>In addition, the statement that the funds spent to help OCFO with timely cash reconciliation this year has been misspent is an unsupported statement. The HUDCAPS SF-224 data base was not close to agreement with the Treasury 6653 reports for any month until late in the fiscal year. In the meantime, absence of timely cash reconciliations was the primary basis for the disclaimer opinion on the FY 1999 audit. OCFO does not believe that the audit side of OIG would agree that spending money to assist in staying current with cash reconciliations and providing (even if</p>

		just short term) additional reconciliation templates and tools is money misspent. The OIG reports that it was their idea to automate the SF-224 and the OCFO agreed with their position. That statement is incorrect. The OCFO advised the OIG that it had initiated action to convert to an automated SF-224 through HUDCAPS. The OCFO has been working to implement the automated reporting and in July 2000 began a testing phase in anticipation of preparing the SF-224 from HUDCAPS. However, the U.S. Treasury will not be prepared to receive the automated information until January 2001.
62	Page 26, 3A	End the sentence with " ...verification process". Omit the rest of the sentence. OCFO will look into changes needed in order to utilize SF-224 output file in cash reconciliation process and weigh the benefit of these changes versus the current process.
63	Page 26, 3B & 3C.	Recommendations 3B and 3C have some redundancy and therefore, should be combined.
64	Page 26, 3B	OCFO has implemented a process that, as of October 2000, produces SF-224 data that we are ready to transmit to Treasury once GOALS II is available to HUD, estimated to be January 2001.
65	Page 26, 3C	HUD plans to develop the associated policies and procedures to accomplish the cash reconciliation under the automated SF-224 function in HUDCAPS. End the sentence with " ... reconciliation process". Omit the rest of the sentence.
Management Controls		
66	Page 27	Regarding "Significant Weaknesses", we disagree that weaknesses are "significant". OCFO has already taken actions to correct the reported weaknesses as described above, including the implementation of HUDCAPS configuration management. The audit report should reflect corrective actions completed during the period of the audit field work.
Follow Up on Prior Audits		
67	Page 28	The last sentence is not correct. Corrective actions have been completed on all weaknesses discussed in Finding 1.

(THIS PAGE LEFT BLANK INTENTIONALLY)

OIG Evaluation of Auditee Comments

OIG's Response to Auditee's Detailed Comments to OIG's Draft Audit Report on HUDCAPS dated November 30, 2000

The following is OIG's response to the Office of Chief Financial Officer (OCFO) detailed comments to our draft report. The specific OCFO's comments are addressed in Appendix B.

OIG Response to Comment 1 - We recognized in the draft report the efforts OCFO made to address the reported deficiencies. However, the serious nature of the deficiencies reported cannot be overshadowed by the limited progress so far. Adequate controls over CM, UTTCOR, and data reliability are not fully implemented. As for the lack of specific criteria, we have included, where appropriate, additional clarification of criteria in the final report.

OIG Response to Comment 2 - We disagree with the OCFO's comments. We consider the deficiencies significant. Although actions had been taken to correct some of the reported weaknesses during the course of our audit, not all of the deficiencies have been corrected. For instance, maintenance of HUDCAPS is suppose to be under the full control of CM tool, Endeavor. However, contractors involved with software maintenance can still bypass Endeavor control and directly update production data. Audit trails for UTTCOR were developed but we noticed the records maintained lacked key or incomplete information to be of any use.

With respect to the comment that the cover letter should include a summary of comments by management officials, we do not consider the cover letter as the proper place for management comments. Management comments will be included in the body of the report as appropriate.

OIG Response to Comment 3 - The OIG will change all references in the report from the Chief Financial Officer to the Office of Chief Financial Officer.

OIG Response to Comment 4 - The Department has made numerous promises in past years to implement CM for all critical applications, including HUDCAPS; but these efforts have been continually delayed. While we understand the OCFO management decision to delay CM implementation in HUDCAPS until December 2000, the reasoning is without merit. HUDCAPS would have been under CM control at least three years ago had the OCFO invested adequate resources and effort to implement our earlier recommendation on CM. We were concerned that further delays could expose HUDCAPS to unauthorized changes, incorrect versions, and errors and omissions that could destroy critical financial data or disrupt system continuity. We indicate in the final report that after continual delays, the OCFO has finally implemented CM for HUDCAPS in December 2000.

The OCFO's claim that HUDCAPS was the furthest along of any major system in being fully implemented under CM is not valid. HUD's Single Family Asset Management System (SAMS)

and Computerized Home Management System (CHUMS), both major critical systems, had implemented CM prior to HUDCAPS.

OIG Response to Comment 5 - Ensuring service continuity is a major part of system maintenance. The SDM defines system maintenance as the performance of activities required to keep a system operational and responsive to users' changing needs after the system is accepted and placed into production. The establishment of an adequate backup and recovery process ensures the continuity of operations and, if significantly disrupted, could have a serious impact on critical mission support functions.

OIG's Response to Comment 6 - In the draft report (paragraph 7 of the Executive Summary), we gave the OCFO credit for the corrective actions taken on the Problem Resolution issue. We indicated that "During the course of our review, the Office of Chief Financial Officer (OCFO) took steps to address some of the identified maintenance weaknesses. These steps included reducing access privileges for some of the users performing maintenance functions, and **establishing procedures to ensure timely resolution of system and/or user experienced problems**"(emphasis added).

OIG's Response to Comment 7 - We believe the title is correct and consistent with what was reported in the summary and body of the report. The title reflects system maintenance issues for HUDCAPS. We reported, in the draft report, several system maintenance deficiencies under this title, one of which relates to the configuration management issue.

OIG's Response to Comment 8 - See OIG Response to Comment 4.

OIG's Response to Comment 9 - See OIG Response to Comment 4.

OIG's Response to Comment 10 - We believe that the statement in the report is accurate. The HUDCAPS DB2 binds are still performed on the production machine outside of Endeavor control. The binds should be accomplished through the use of the Endeavor processors which provides an audit trail of all bind activity for all HUDCAPS DB2 applications. However, we will provide further clarification of this process in the final report.

OIG's Response to Comment 11 - See OIG's Response to Comment 4. The quote from the "Yellow Book" is not relevant to the discussion.

OIG's Response to Comment 12 - The OCFO has not corrected all of the deficiencies. At the time of our review, contractor personnel involved with maintenance of HUDCAPS are still allowed access to production data, contrary to internal control standards.

OIG's Response to Comment 13 - We have revised the subtitle.

OIG's Response to Comment 14 - NIST Special Publication 800-12 indicates that contingency planning involves more than planning for a move offsite after a disaster destroys a data center. It

also involves how to keep an organization's critical functions operating in the event of disruptions, both large and small. For this reason, an agency should have procedures in place to protect information system resources and minimize the risk of unplanned interruptions. Additionally, GAO's FISCAM Section SC-4 states that the frequency of testing will vary depending on the criticality of the entity's operations. Generally, contingency plans for very critical functions should be tested every year or two. HUDCAPS is considered by HUD to be a very critical system. This application is included in the Department's Business Resumption Plan (BRP). Appendix C of the BRP also describes the backup and recovery procedures for the critical applications (which includes HUDCAPS) that are to be performed as part of their BRP testing. However, as we explained in our draft report, HUD's BRP only addresses procedures for backup and recovery if an entire facility went down, and not for less severe disruptions such as equipment failures or data base corruption where applications programmers and the data base administrator would work together to restore the data.

OIG's Response to Comment 15 - Your reference to the "Yellow Book" is misguided. We discussed this issue in a meeting during which an individual from the OCFO was present along with HUDCAPS contractors. We were informed at the meeting that neither the OCFO nor the contractors were aware of any procedure that ensures backup processing includes data files that have been added to the application since the last backup. We will include this explanation in our final report.

OIG's Response to Comment 16 - We believe that the subtitle as noted in the draft report is an accurate representation of the overall condition. The lack of a formal prioritization process is the cause for this condition. Also, as was noted in the draft report, we recognized the OCFO for taking corrective action when notified of this deficiency. Since we verified during the audit that the appropriate corrective action had been taken, no recommendation was necessary.

OIG's Response to Comment 17 - The subtitle is accurate. The problem resolution process has not been effective. Numerous problems remained unresolved for a long period of time. The OCFO addressed concerns in this area only after we began questioning the lack of progress in resolving long standing technical problems.

OIG's Response to Comment 18 - Your reference to the "Yellow Book" is misguided. We will quantify in our report the number and percentage of problem records that remain open for six months or over. As for clarifying what is meant by "critical problems," this can be illustrated from the OCFO's own review of the open problem list dated May 3, 2000. After this issue was brought to their attention, the OCFO established a prioritization process for the open problems based on either a High, Medium, or Low designation. They identified two problems that were over six months old, i.e. both originated May 1999, one was designated as a High priority and the other as a Medium priority.

OIG's Response to Comment 19 - We acknowledged in the subsequent paragraph that the OCFO has taken action to correct this deficiency.

OIG's Response to Comment 20 - We recognized in our report that the OCFO had taken action to correct the deficiency in May 2000. The word "appeared" in our conclusion related to the problem resolution process deficiency was based on our review of the documented procedures provided to us by the OCFO in May. This prioritization process was still evolving after we had completed our review of this documentation. As part of the financial statement review, we were to independently validate the procedures used through an unannounced observation of one of the weekly problem resolution meetings held by the OCFO. However, we were requested by the OCFO not to attend these meetings. We were informed that our presence in the past meetings was intimidating to the personnel attending and, thereby, inhibited open dialog needed to adequately address the problems. Section 7.20 of the "Yellow Book" also states that "The strength of the auditors' conclusions depends on the persuasiveness of the evidence supporting the findings....." Also, Section 6.46 states that "Sufficient, competent, and relevant evidence is to be obtained to afford a reasonable basis for the auditors' findings and conclusions." Section 6.47 also delineates the different categories of evidence. One of the categories is "physical evidence" which "is obtained by auditor's direct inspection or observation of people, property, or events." Section 6.53 provides that "Evidence is competent to the extent that it is consistent with fact (that is, evidence is competent if it is valid)." Accordingly, since we were not given the opportunity to validate the procedures independently through an unannounced observation of one of the meetings, we could not conclusively determine that the procedures were adequate.

OIG's Response to Comment 21 - We have revised the recommendation to remove the recommendation that HUD use the Endeavor processors to perform source code compilations and the Endeavor ship function to release the final executable code to production. However, the recommendation for HUD to implement the DB2 Bind process under Endeavor is still valid (See OIG's response to Comment 10).

OIG's Response to Comment 22 - While we agree with the actions taken to restrict access as indicated, the OCFO did not address Recommendation 1C. This recommendation is on monitoring procedures to ensure that excessive access privileges are not granted. Also, as indicated before, contractor personnel have been continually granted update access to HUDCAPS production data outside of Endeavor.

OIG's Response to Comment 23 - We have revised the word to indicate "administrative" and clarified what these procedures should include.

OIG's Response to Comment 24 - We believe our statement that "We found that the Decision Support System (DSS) was not periodically reconciled with the data in the HUDCAPS production tables **to ensure accuracy and completeness** " is accurate. While there is a daily verification of the number of records loaded to the DSS, it does not mean that the data is accurate and complete. As we reported in the finding, because certain tables do not exactly mirror the HUDCAPS production tables and records are appended daily, the potential exists that the data in DSS may not be accurate and complete unless an adequate reconciliation process is in place.

OIG's Response to Comment 25 - We did recognize the efforts made by the OCFO to correct the UTTCOR control deficiencies. This was reported on page iii, Paragraph 5 of the Executive Summary in the draft report.

OIG's Response to Comment 26 - We did not misstate the status of PAS to HUDCAPS posting models. As reported in the finding (page 15), we compared the posting model provided to us dated April 18, 2000 with the actual postings in the general ledger **for that same date**. We obtained verification by e-mail from the OCFO that this was the most up to date PAS to HUDCAPS posting model. The OCFO believes that our finding was caused by a timing difference and not by erroneous postings. However, the OCFO did not provide us with the necessary documentation to support their assertion.

OIG's Response to Comment 27 - We have revised the statement on page iii, paragraph 4 of the report to "HUDCAPS had not been timely updated to reflect legislated changes."

Our statement that the four funds (0148 and three X funds) were not correctly posted in the general ledger is accurate. The PAS to HUDCAPS Interface program did not post the transactions of the 0148 fund and three X no-year funds (4098, 4015A and 4015) into the HUDCAPS general ledger. Prior to August 2000, the OCFO manually posted the summary transactions of the three X funds but not 0148. In November 2000, HUD started to process the 0148 fund through the PAS to HUDCAPS Interface, but not the three X funds.

The OCFO's explanation as to why the appropriation transfers were not timely converted in HUDCAPS for the two funds is not relevant. From the time the appropriation bill authorizing the transfer was made, the OCFO took almost one year to convert the two funds to the proper appropriation in HUDCAPS. Accordingly, the detail transactions supporting the two fund balances would be inaccurate in the general ledger during the fiscal year.

OIG's Response to Comment 28 - We do not agree that the individual sentences related to the resolution of the deficiencies should be reported under the previous applicable paragraphs. We believe our statement regarding "This investment was neither cost effective nor efficient" is adequately supported in the body of the report. It is obvious from the comparison of the manual intensive methods used by the contractor versus the more direct and automated approach using HUDCAPS identified by the OIG that the investment was not cost effective nor efficient.

OIG's Response to Comment 29 - The finding is accurate. OCFO has misinterpreted this finding. We found problems with "Inadequate controls over HUDCAPS **data** reliability." However, we concluded in our cover letter that HUDCAPS can be a reliable financial management system if the Department is willing to invest the time and resources to correct the deficiencies we have identified in the report.

The OCFO's assertion that the auditors did not perform due professional care is false and misplaced. The OCFO indicated that the report was not issued timely since most of the reported

deficiencies were based on the field work conducted in March and April 2000, and that corrective actions had been taken for most of the problems from May to October. The OCFO cited the OIG for not complying with Sections 7.6 and 7.7 of the “Yellow Book” that deals with timeliness of reporting. However, Section 7.8, which was not cited by the OCFO in their comments, provides that “The auditors should consider interim reporting, during the audit, of significant matters to appropriate officials. Such communication, which may be oral or written, is not a substitute for a final report, but it does alert officials to matters needing immediate attention and permits them to correct them before the final report is completed.” We complied with this auditing standard by providing the OCFO, as part of the weekly status meetings, any preliminary findings or issues that we had developed. Where we were informed that corrective action was taken, we verified, to the extent practicable, that such action was taken and reported accordingly.

OIG’s Response to Comment 30 - We agree with the OCFO comment and have changed the discussion to past tense.

OIG’s Response to Comment 31 - The finding is sufficiently supported. As an example of a data reliability problem in DSS, we found during our review of the OCFO’s problem resolution process that an abnormal ending occurred in March 1999 during HUDCAPS processing when the contractors attempted to load records in the DSS. At the time, the contractors’ research and resolution process into this problem revealed no record discrepancies in the DSS Detail Journal. However, in October 1999, seven months later, the contractors found 28 missing records in the DSS Detail Journal when they reconciled the data with the GLDB table in HUDCAPS. Had an adequate reconciliation process been in place, this discrepancy could have been identified and corrected in a more timely manner. As for the comment on the question if DSS reports were not used and what was used, we stated in our report that because there was no reconciliation between DSS and HUDCAPS data, there was no assurance that the data in the DSS was accurate and complete and, therefore, management could not rely on the reports for financial and program management purposes.

OIG’s Response to Comment 32 - The wording has been clarified.

OIG’s Response to Comment 33 - There is no contradiction in the two paragraphs. The first paragraph indicates, as the OCFO noted, that no procedures were established to reconcile data in DSS with HUDCAPS production data. The third paragraph indicates that as a result of our review, procedures were subsequently established. We have added in the final report that we performed an analysis and validation of the DSS procedures and process established by HUD and found them to be adequate. Consequently, we will not make any recommendations on this issue.

OIG’s Response to Comment 34 - The wording is correct in characterizing the use of UTTCOR. The OCFO did not fully implement control over UTTCOR until November 2000. We also report that because the utility was not properly controlled, it exposes HUD’s critical financial data to **possible** errors and fraudulent activities. UTTCOR is such a powerful utility that instances of misuse by knowledgeable users could remain undetected.

With respect to the audit trail, subsequent to the draft report, we found serious problems with the implementation. Key audit trails information collected in an MS Access database were either missing or incomplete. UTTCOR remains vulnerable to misuse.

OIG's Response to Comment 35 - We have credited the OCFO for establishing procedures for controlling the SUSF file and that they are using reports to manage the SUSF rejected transactions. However, the finding will remain as is until the OCFO addresses the recommendations in the report.

OIG's Response to Comment 36 - Our statement that approximately 25 percent of the PAS to HUDCAPS interface rejected transaction in the SUSF had not been reconciled is a valid statement. The OCFO must reconcile the rejected transactions with the correct data so that these transactions will pass through the interface and post correctly to the general ledger.

While system maintenance is a shared responsibility between the OCFO and the program offices, the OCFO, as the system owner of HUDCAPS, needs to take a more proactive approach to ensure that the program offices are resolving their on-line rejected transactions in a timely manner. As noted in the report, we recommend that the OCFO send monthly reports to the program offices that show the age of the on-line rejected transactions and the reasons for the rejections. The OCFO should also consider deleting the program offices' on-line rejected transactions on a quarterly basis.

OIG's Response to Comment 37 - We intend to keep the reference "directed AMS, the maintenance contractor." We clarified in the report that as part of the enhancement initiated by the OCFO, the contractor was to develop extract files from the SUSF which are loaded each night in the CFO Data Mart for analysis the following day.

OIG's Response to Comment 38 - The sentence was lifted directly from the OCFO's SUSF File Maintenance procedures dated September 30, 2000, page 1, second paragraph under the caption "Documents entered directly to HUDCAPS by approved system users." The procedure states "During the last week of September, CFO systems will delete all SUSF documents with a last date earlier than October 1 of the prior fiscal year." We concur that it is the user's responsibility to ensure that the transactions are either accepted or deleted from the SUSF if no longer needed. However, the OCFO can take a more proactive approach by coordinating with the user's periodically, such as quarterly, to delete the no longer needed transactions from the SUSF.

OIG's Response to Comment 39 - The OCFO implies that because the PAS to HUDCAPS transaction rejections represent only a small fraction of the overall daily transactions that it is considered insignificant. However, the OCFO failed to explain that all of the PAS to HUDCAPS rejections represent some type of financial transaction that affects the general ledger. As was noted in our report, we found that approximately 25 percent of the rejected transactions have been in the SUSF file over 3 months. Accordingly, the longer these transactions remain unreconciled, the longer the general ledger would remain inaccurate.

OIG's Response to Comment 40 - Our April 18, 2000 testing revealed that a number of postings to the general ledger did not agree with the PAS to HUDCAPS interface posting model documentation. We found thirteen posting transaction discrepancies with an absolute (both credit and debit) value of \$10.5 million. The OCFO indicates that our finding was caused by our review of reference documentation whose source data in HUDCAPS had changed since the documentation was printed. However, we tested the source data on the same date as the date of the most current posting model provided by the OCFO. Although the OCFO has assured us that there were no erroneous postings, they did not address our recommendation to establish formal policies and procedures to ensure that the PAS to HUDCAPS posting model is timely updated.

OIG's Response to Comment 41 - See OIG's response to comment 27.

OIG's Response to Comment 42 - We have revised the final report to include the OCFO recommended sentence.

OIG's Response to Comment 43 - While we understand the reasoning for postponing the conversion of these funds in FY 1999, the conversion should have been completed during FY 2000.

OIG's Response to Comment 44 - We reported that the OCFO was using a manual process to post these transactions. However, these transactions were not occurring "concurrently" as the OCFO claims. We found that transactions were posted manually after the transaction occurred. Further, the postings were made at the summary level rather than at the detail level. Thus, not only were the postings not made timely, the detail transaction activities were not recorded in HUDCAPS. However, we have changed the final report to indicate that the postings were incomplete rather than erroneous.

OIG's Response to Comment 45 - Recommendation 2A is related to the controls over the UTTCOR utility and not configuration management. However, we have removed the recommendation in the final report as OCFO has taken action to correct this deficiency.

OIG's Response to Comment 46 - The OCFO indicated that management of the SUSF rejects by program offices does not require a report since they have on-line access to this file. However, in response number 36, the OCFO stated that they developed a variety of reports from the Data Mart SUSF file and have used these reports to assist in managing the contents of the SUSF. It is our position that the OCFO, as the system owner of HUDCAPS, is responsible for maintaining HUDCAPS to ensure that the system is running properly and efficiently and responsive to users' needs. Accordingly, since the OCFO has already developed a variety of reports to assist in managing the SUSF, we believe they could also provide to the program offices a monthly aging listing of their applicable SUSF rejections and any other reports or listings which may assist both the OCFO and the program offices in resolving and clearing the rejected transactions.

OIG's Response to Comment 47 - The OCFO disagreed with our recommendation but did not provide an explanation as to why rejected documents could not be purged or deleted on a

quarterly basis rather than annually. If the OCFO can provide a reasonable explanation as to why it cannot be done on a more regular basis, we will provide a management decision and close the recommendation.

OIG's Response to Comment 48 - This recommendation is valid. The claim that OCFO has been resolving all PAS to HUDCAPS rejected transactions on a daily basis is not accurate. We found approximately 25 percent of the PAS to HUDCAPS rejected transactions have remained in the SUSF file for over 3 months, which indicates that these transactions are neither resolved daily nor monthly. Treasury requires agencies to perform cash reconciliation's on a monthly basis. Therefore, it is critical that the general ledger (HUDCAPS) contain accurate, complete, and timely information.

In a previous response (OCFO comment 36), the OCFO had indicated that prior to FY 2000 year end there were no SUSF transactions from PAS unprocessed. We reviewed the SUSF file as of February 10, 2001 and found 32 rejected PAS transactions. Of the 32 PAS rejected transactions, 6 (19 percent) were over one month old with one transaction almost seven months old. We recognize that the OCFO has taken action to resolve and reduce the number of rejected transactions in the SUSF file. However, we remain concerned that without a policy to resolve rejected PAS to HUDCAPS transactions on a monthly basis, rejected transactions may not be timely processed to the general ledger and affect HUD's ability to provide accurate and complete cash reconciliation.

OIG's Response to Comment 49 - See OIG's response to Comment 40.

OIG's Response to Comment 50 - The "detail transaction level" means that individual transactions that can be traced to specific accounts in the general ledger.

OIG's Response to Comment 51 - We have combined the two recommendations.

OIG's Response to Comment 52 - We have combined the two recommendations.

OIG's Response to Comment 53 - We believe our statement regarding "This investment was neither cost effective nor efficient" is adequately supported in the body of the report. It is obvious from the comparison of the manual intensive methods used by the contractor versus the more direct and automated approach using HUDCAPS identified by the OIG that the investment was not cost effective nor efficient. These manual methods are explained and illustrated in the report. Our report explains that the manual method is prone to error. Also, we reported the manual effort is cumbersome and resulted in differences between the official general ledger and the prepared SF-224 reports. These differences were reported under finding two of the draft report. For example, we identified cumulative accounting differences of \$327,782 when we compared selected accounting data in the general ledger with the SF-224. This comparison was performed by directly accessing HUDCAPS files. The contractor method involves a manually intensive process which is susceptible to data errors and omissions.

OIG's Response to Comment 54 - We believe the finding accurately reflects the condition that the OCFO is not fully using HUDCAPS for the cash reconciliation process.

OIG's Response to Comment 55 - The OCFO indicated that they had to develop a comparison process outside of HUDCAPS because "all monthly cash activity may not post in time to the HUDCAPS SF-224...." We do not understand why cash activity cannot be timely posted to HUDCAPS. Transactions are posted either by direct on-line inputs or through the interfaces such as PAS to HUDCAPS. Both of these methods automatically update the general ledger.

OIG's Response to Comment 56 - The OCFO indicated that HUDCAPS SF-224 was not being used because it was not complete. However, we believe the primary reason for not using HUDCAPS SF-224 was because the OCFO had not changed their business practices in anticipation of converting the general ledger from PAS to HUDCAPS in FY 99. Prior to the conversion, the OCFO was preparing the SF-224 manually. However, this manual process continued months after HUDCAPS became HUD's official general ledger even though the automated SF-224 function in HUDCAPS was available for use.

OIG's Response to Comment 57 - OCFO has not provided any evidence to support the assertion that the process of creating the SF-224 from HUDCAPS is virtually completed. We removed the specific reference to a contractor from the report. However, the term "Contractor developed" will remain in the final report.

OIG's Response to Comment 58 - Our statement that the process was inefficient is based on our audit work where we traced transactions through the system using the automated SF-224 feature. We found that this methodology is more efficient than the manual intensive process used by the OCFO.

OIG's Response to Comment 59 - We clarified in the report to reflect that the data from the HUDCAPS FSUM Table and HUDCAPS receivables comes from the Data Mart.

OIG's Response to Comment 60 - Our report did not state or imply that the OCFO use the SF-224 exclusively for cash reconciliation. We realize that the SF-224 is only one part, albeit an integral part, of the whole reconciliation process with the Treasury records.

OIG's Response to Comment 61 - We believe the OCFO has taken our statements out of context. We do not consider the HUDCAPS SF-224, in and of itself, as a "cash reconciliation product." As the report indicates, we believe that the HUDCAPS SF-224 can be **used** to perform cash reconciliation. The funds used to invest in the contractor developed methodology was not cost effective and could have been put to better use.

OIG's Response to Comment 62 - We see no reason to change wording for recommendation 3A.

OIG's Response to Comment 63 - We combined Recommendations 3C and 3A.

OIG's Response to Comment 64 - We commend the OCFO for establishing a process for implementing the automated SF-224 function in HUDCAPS. However, the OCFO needs to develop formal policies and procedures for this process.

OIG's Response to Comment 65 - See our response to Comment 63.

OIG's Response to Comment 66 - The weaknesses reported are significant. Although actions have been taken to address these weaknesses, deficiencies remain. In particular see OIG responses to Comments 2, 4, 10, and 12

OIG's Response to Comment 67 - Since deficiencies still exist with access control and configuration management, these two areas will remain as significant internal control weaknesses.

(THIS PAGE LEFT BLANK INTENTIONALLY)

Distribution

Secretary, S (Room 10000)
 Deputy Secretary, SD (Room 10100)
 Chief of Staff, S (Room 10000)
 Acting Assistant Secretary for Congressional & Intergovernmental Relations, J (Room 10120)
 Deputy Assistant Secretary for Public Affairs, W (Room 10222)
 Deputy Assistant Secretary for Administrative Services, Office of Executive Secretariat, AX
 (Room 10139)
 General Deputy Assistant Secretary for Administration, AA (Room 10132)
 Deputy Assistant Secretary for Intergovernmental Affairs, S (Room 10120)
 Deputy Chief of Staff for Intergovernmental Affairs, S (Room 10226)
 Deputy Chief of Staff for Policy and Programs, S (Room 10226)
 Special Counsel to the Secretary, S (Room 10226)
 Senior Advisor to the Secretary, S (Room 9100)
 Executive Officer for Administrative Operations and Management, S (Room 10220)
 General Counsel, C (Room 10214)
 Deputy General Counsel for Housing Finance Operations, CA (Room 10240)
 Assistant Secretary for Housing-Federal Housing Commissioner, H (Room 9100)
 Assistant Secretary for Policy Development and Research, R (Room 8100)
 Assistant Secretary for Community Planning and Development, C (Room 7100)
 Assistant Deputy Secretary for Field Policy and Management, SDF (Room 7108)
 Assistant Secretary for Fair Housing and Equal Opportunity, E (Room 5100)
 Director, Office of Departmental Equal Employment Opportunity, U (Room 5128)
 Assistant Secretary for Public and Indian Housing, P (Room 4100)
 Chief Procurement Officer, N (Room 5184)
 Director, Office of Information Technology, AMI (Room 4160)
 Director, Office of Departmental Operations and Coordination, I (Room 2124)
 Acting Director, Enforcement Center, V (Portal Building)
 Director, Real Estate Assessment Center, X (Portal Building)
 Audit Liaison Officer, A (Room 10110)
 Audit Liaison Officer, CFO (Room 2206)
 Acquisitions Librarian, Library, AS (Room 8141)
 Inspector General, G (Room 8256)
 Deputy Inspector General, G (8256)
 Counsel to the IG, GS (Room 8260)
 Public Affairs Officer, G (Room 8256)
 Assistant Inspector General for Audit, GA (8286)
 Deputy Assistant Inspector General for Audit, GA (8286)
 Director, Resources, Community and Economic Development Division, U.S. GAO,
 441 G Street, NW, Room 2T23, Washington, DC 20548; ATTN: Stanley Czerwinski
 Director, Office of Federal Housing Enterprise Oversight, 1700 G Street, NW.,
 Room 4011, Washington, DC 20552; ATTN: Armando Falcon
 Ms. Cindy Fogleman, Subcommittee on Oversight and Investigations,
 Room 212, O'Neil House Office Bldg., Washington, DC 20515

Mr. Steve Redburn, Chief Housing Branch, Office of Management and Budget, 725 17th Street, NW.,
Room 9226, New Executive Office Building, Washington, DC 20503

The Honorable Fred Thompson, Chairman, Committee on Governmental Affairs,
340 Dirksen Senate Office Building, United States Senate, Washington, DC 20510

The Honorable Joseph Liberman, Ranking Member, Committee on Government Affairs,
706 Hart Senate Office Building, United States Senate, Washington, DC 20510

The Honorable Dan Burton, Chairman, Committee on Government Reform
2185 Rayburn Building, House of Representatives, Washington, DC 20515

The Honorable Henry A. Waxman, Ranking Member, Committee on Government Reform
2204 Rayburn Building, House of Representatives, Washington, DC 20515