



**U.S. Department of Housing and Urban
Development, Washington, DC**

Integrated Core Financial System



Issue Date: December 19, 2012

Audit Report Number: 2013-DP-0003

TO: Maurice Jones, Deputy Secretary, SD
//signed//
FROM: Randy W. McGinnis, Assistant Inspector General for Audit, GA
SUBJECT: Review of the Data Conversion Activities and Interface Plans and Procedures for the Implementation of HUD's Integrated Core Financial System

Attached is the U.S. Department of Housing and Urban Development (HUD), Office of Inspector General's (OIG) final results of our review on the Data Conversion Activities and Interface Plans and Procedures for the Implementation of HUD's Integrated Core Financial System.

HUD Handbook 2000.06, REV- 4, sets specific timeframes for management decisions on recommended corrective actions. For each recommendation without a management decision, please respond and provide status reports in accordance with the HUD Handbook. Please furnish us copies of any correspondence or directives issued because of the audit.

The Inspector General Act, Title 5 United States Code, section 8L, requires that OIG post its publicly available reports on the OIG Web site. Accordingly, this report will be posted at <http://www.hudoig.gov>.

If you have any questions or comments about this report, please do not hesitate to call me at (202) 402-8107.

Attachment

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December 19, 2012

Review of the Data Conversion Activities and Interface Plans and Procedures for the Implementation of HUD's Integrated Core Financial System

Highlights

Audit Report 2013-DP-0003

What We Audited and Why

We audited the U.S. Department of Housing and Urban Development's (HUD) plans and procedures for data conversion and system interfaces for the implementation of the HUD Integrated Core Financial System (ICFS).

We conducted this audit as a component of the testing of general and technical controls for information systems in connection with the annual audit of HUD's consolidated financial statements.

What We Recommend

We recommend that the Deputy Secretary reevaluate the interface approach documents and the data conversion plan to ensure that tasks for each section have been adequately completed by HUD's Integrated Financial Management Improvement Project contractor and verified by OCFO. Specifically, the Office of the Chief Financial Officer (OCFO) should complete end-to-end testing of the interface processes, secure an independent verification and validation contractor for data conversion validation, coordinate with program offices to ensure that interface systems are compatible, and ensure that the current financial applications are available until a compatible application is complete.

What We Found

HUD's effort to modernize its financial management system is called the HUD Integrated Financial Management Improvement Project (HIFMIP). One goal of HIFMIP was to create ICFS, and replace only two of the five financial management systems that HUD uses to accomplish the core financial system functions. The OCFO did not properly plan and manage the implementation of ICFS. Since 2003, HUD has spent more than \$35 million on HIFMIP and does not have an operational new core financial system. The initial vision document was initiated in 2003 and issued in 2004. The contract was awarded in September 2010. Before executing the contract, OCFO did not update Project information, follow up with system owners to ensure that required actions were completed, plan for the conversion of public and Indian housing data within the HUD Central Accounting and Program System, set up a Project performance measurement baseline for each data conversion cycle, and ensure that the scope of the conversion in the conversion plan would meet HUD's needs and comply with the contract. Also, OCFO did not ensure that key staff and program office stakeholders were involved in pertinent decisions, establish an effective deliverable approval process, ensure that converted data were verified by an independent verification and validation contractor, and verify that the contractor complied with the scope of the conversion.

Base period performance goals and objectives were not met and additional time and funding will be needed to complete the project.

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BACKGROUND AND OBJECTIVE

Since fiscal year 1991, OIG has annually reported on the lack of an integrated core financial system in our audits of the HUD's financial statements. HUD uses five separate financial management systems to accomplish the core financial system functions. The current effort to modernize HUD's financial management system is called the HUD Integrated Financial Management Improvement Project (HIFMIP). The initial vision document was initiated in 2003 and issued in 2004 and functional documents were created. However, progress was halted due to contract protest and the Office of Budget and Management (OMB) involvement. The contract was awarded in September 2010. See Appendix C for a timeline of events for HIFMP. The original scope of HIFMIP was to encompass all of HUD's financial systems, including those supporting FHA and Ginnie Mae. However, the inclusion of the FHA and Ginnie Mae portions has been put on hold as a result of review by OMB. Also, the first phase of HIFMIP will replace only two of the five financial management systems, resulting in the creation of the new Integrated Core Financial System (ICFS). It is not clear how this new system will lessen the dependency on and integrate with the other three core financial systems, nor is it clear how completion of this first phase will reduce or eliminate the manual processing necessary to generate HUD's consolidated financial statements. Since 2003, HUD has spent more than \$35 million to implement the HIFMIP vision, including the implementation of ICFS.

Delays have plagued the Project since 2006 and HUD's Deputy Secretary stopped it in March 2012. Based on the contract that was awarded in September 2010, the implementation date for ICFS was March 2012. In the summer of 2011, the Project contractor proposed changing the implementation date to May 2012. However, HUD did not formally approve the proposed new date. In March 2012, the Project was stopped, and HUD began reevaluating its options for the Project. HUD could revise the Project plan to implement a "go live" in the first or second quarter of fiscal year 2013 or develop and implement a "phased" approach in fiscal year 2013 or 2014. This change in direction would require that HUD quickly address the risks; apply additional resources; and analyze contract, funding, and Project schedule issues. If this was not possible, another option was to cancel the implementation of ICFS and stay with the current HUD Central Accounting and Program System. However, staying with this system would require enhancements to the legacy financial system over time to reduce risk associated with audit, security, financial reporting, and operational effectiveness.

Project sponsorship of the Project has been transferred from the Office of the Chief Financial Officer (OCFO) to the HUD Deputy Secretary. The Deputy Secretary and a working group comprised of the OCFO, Office of the Chief Information Officer, and the Office of the Chief Procurement Officer are reassessing its options for the Project. To date, HUD has spent more than \$35 million on the Project.

Our audit objective was to review HUD's readiness to fully implement ICFS. Specifically, we wanted to determine whether HUD had properly planned and managed the implementation of ICFS. We focused on implementation activities related to data conversion and key interfaces with ICFS.

RESULTS OF AUDIT

Finding 1: OCFO Did Not Properly Plan and Manage the Implementation of ICFS

The OCFO did not properly plan and manage the application interfaces and data conversion portions for the implementation of ICFS. This condition occurred because HUD did not apply (maintain) a consistent project management philosophy nor did it implement the recommendations of the Project roadmap. As a result, \$35 million has already been spent on the Project; ICFS was not completed within the initial contract period; the Project may be in jeopardy; and additional time and funding will be needed to complete the Project.

OCFO Did Not Properly Plan the Project

Project Information Was Not Updated Before Contract Execution

OCFO did not update Project information between the end of the planning phase and the execution of the Project contract. In 2003, HUD initiated the Project with the original scope identified as a multiyear project to replace HUD's core financial system with a solution that integrated financial information HUD-wide. The plans essentially affected 34 separate applications within the agency and 73 existing interfaces between computer systems.

The HIFMIP contract solicitation and statement of objectives were issued in fiscal year (FY) 2006. These documents were created based upon HIFMIP project documentation created in the early phases of the project (through FY 2005) and those documents were provided to all contractors for review in the request for proposal, development of a performance work statement, and etc. The systems listed in these documents, current at the time they were written, changed between 2005 and 2010, when the HIFMIP ICFS contract was awarded. Because of this, new and retired systems were not reflected in the HIFMIP contract that was awarded in September, 2010. Including outdated project documentation within the contract solicitation resulted in the execution of a contract with inaccurate information regarding the scope of work to be performed. This required additional time and resources from both HUD and contractor staff and delayed the definition of interface requirements and the completion of several interfaces.

In December 2010, we issued a finding¹ that Project planning documents had not been updated to reflect current conditions. We noted that within the 18-month

¹ Audit Report 2011-DP-0003 - HUD Did Not Fully Comply With the Requirements of OMB Circular A-127.

window for accomplishing the initial implementation, the contractor would have to update Project documentation, reevaluate system interfaces due to changes in HUD's computing environment over the years, and assess changes in Federal requirements. OCFO officials stated that they did not see a need to update the vision and requirements documents developed through fiscal year 2005 because they believed that neither the amount of time elapsed nor detail changes would alter the objectives that the contractor would agree to perform for a fixed price. OCFO officials also stated that the contract would include objectives to verify that HUD was current with Federal requirements and to maintain that position throughout the life of the contract.

Office of Management and Budget (OMB) Circular A-127, section 6, part H, requires that agencies implementing a new core financial management system monitor the project's progress and institute performance measures to ensure that it is on schedule and within budget. Agencies must also assess risks regularly and mitigate them in a timely manner. OCFO did not regularly assess the risks. The systems listed in the Project planning documents, current at the time it was written, changed between 2005 and 2010, when the Project's ICFS contract was awarded.

OCFO Did Not Follow Up With Program System Owners

OCFO did not follow up with program office system owners during the 5-year period between the completion of the planning phase and the execution of the contract to ensure that actions required from the system owners had been completed. Specifically, OCFO did not ensure that maintenance contracts for those systems required to interface with ICFS contained clauses and funding to complete the work, contrary to HUD's system development methodology². This section provides that HUD should "Clarify resource availability before a system project proceeds. Beginning with the approval of a project, the continuation of a system project is contingent on a clear commitment from the sponsoring management. This commitment is embodied in the assurance that the necessary resources will be available, not for the next activity only, but for the remainder of the lifecycle."

For example, the contract for the newly implemented HUD Integrated Acquisition Management System³ contained requirements and funding to create an interface with the HUDCAPS⁴ application; however, ICFS was not included. HUD's planned interface with the Facilities Resource Management System⁵ was not completed because the maintenance contract for the application expired in August

² HUD System Development Methodology, Introduction, Page 9.

³ HUD Integrated Acquisition Management System is a Web-based software that is the acquisition package most widely used in government. It can be customized as needed to meet HUD's specific requirements.

⁴ HUDCAPS captures, reports, controls, and summarizes the results of the accounting processes, including budget execution and funds control, accounts receivable and collections, accounts payable, and the general ledger.

⁵ The Facilities Integrated Resource Management System is used to maintain HUD data on its space alterations projects, office equipment, and leased office space.

of 2011 and had not been renewed. The planned interface with FedTraveler⁶ was delayed because necessary contract modifications and funding to have the U.S. General Services Administration's vendor-contractor participate in the process had not been completed. The lack of OCFO follow-up with the system owners, to ensure that actions required from the program office system owners had been completed, contributed to the delays.

OCFO Did Not Plan for the Conversion of Public and Indian Housing Data Within HUDCAPS

OCFO did not fully exercise its financial management authority, as provided by the Chief Financial Officers Act of 1990 (Public Law 101-576), to oversee the conversion of public and Indian housing data within HUDCAPS. On August 1, 2005, the Assistant CFO for Budget sent a memorandum to the General Deputy Assistant Secretary for Public and Indian Housing discussing the HIFMIP project and their plans to issue a request for proposal. Within the memorandum, the Assistant CFO informed PIH that "The HIFMIP budget, timeline and scope do not provide either the time or resources to modify the new core financial system to perform programmatic functions." The Office of Public and Indian Housing did not complete the conversion and transfer of voucher and moderate rehabilitation program data in the HUDCAPS accounting system, and OCFO did not adequately monitor HUD's actions and plan for a mitigation strategy before executing the contract in September 2010. OMB's guidance to agencies specifies that an OCFO should have the authority to manage directly or monitor, evaluate, and approve the design, budget, development, implementation, operation, and enhancement of agencywide and agency component accounting, financial, and asset management systems. One of the original objectives for the Project was to retire HUDCAPS. The Office of Public and Indian Housing maintains critical tenant-based rental assistance program data in HUDCAPS, but PeopleSoft⁷ cannot address the data requirements without customization. Thus, HUDCAPS could not be turned off, as the customization had not been completed.

OCFO Did Not Set Up a Project Performance Measurement Baseline for Each Data Conversion Cycle

The performance measurement baseline was necessary so that OCFO management could receive timely results from each of the mock conversion cycles and properly measure and analyze Project performance. The Project contract requires the contractor to conduct at least three mock data conversions and deliver the results in an analysis report. However, OCFO did not negotiate with the contractor to establish a baseline due date for each conversion. Rather, only one baseline due date was used to measure the Project performance at the end of the third conversion cycle. As a result, OCFO could not ensure that all

⁶ Fedtraveler is a comprehensive, end-to-end service to plan, book, track, approve, and request reimbursement for travel services for the Federal employee.

⁷ PeopleSoft is an integrated software package that provides a wide variety of business applications to assist in the day-to-day execution and operation of business processes. Each individual application interacts with others to offer an effective and efficient means of working and reporting results.

conversion issues identified during the two conversion cycles were followed up in a timely manner.

OCFO Did Not Ensure That the Scope of the Conversion in the Conversion Plan Would Meet HUD's Needs and Comply With the Project Contract

OCFO's financial systems maintain about 15 years of financial transactions, and HUD needs to have historical data converted to ICFS due to the high level of demand for ad hoc reporting using historical data. However, at the contractor's recommendation, OCFO management agreed to allow the contractor to convert only fiscal years 2011 and 2012 financial transactions. As a result, OCFO's ability to produce reports based on historical data could be limited if HUDCAPS is retired.

OCFO Did Not Properly Manage the Project

OCFO Did Not Involve Key Staff in Decisions

OCFO did not assign specific individuals and obtain the participation of skilled individuals for each of the interfaces or use integrated project teams in the interface decision-making processes as recommended in HUD's system development methodology⁸ for life cycle management projects. Specifically, OCFO assigned a project manager for the Project when the contract was awarded in September 2010; however, it did not formally assign specific individuals to lead the various aspects of the Project, including the interfaces. HUD's system development methodology states that specific individuals should be assigned to perform key roles throughout system development. Certain roles are considered vital to a successful system project, and at least one individual should be assigned to fulfill each role. More than one individual should represent the users of the system to help fully accomplish the objectives of the project and assist in making decisions that could affect the users. Further, the skill of the individuals participating in a system project is the single most significant factor in a successful project. Because OCFO did not assign a specific individual to be responsible for the interface portion of the Project, obtain the participation of skilled individuals, and use integrated project teams to make decisions, it essentially left control of the Project to the contractor.

OCFO Did Not Ensure That all Program Office Stakeholders Were Involved With the Data Conversion-Related Activities

Although the Project contractor and Project team held information exchange meetings with stakeholders such as the Office of Community Planning and Development, Office of Policy Development and Research, Office of Fair Housing and Equal Opportunity, and Office of Healthy Homes and Lead Hazard Control during the initial phase, the Project contractor and Project team did not

⁸ HUD System Development Methodology, Introduction, Pages 8-9.

have additional meetings with these stakeholders to discuss conversion-related activities throughout the Project. HUD's project planning and management life cycle procedures state that the project should "Identify stakeholders and organizations that are impacted and/or have a stake in the success of the project. Many of these stakeholders may become members of the Integrated Project Teams (IPT) and play a significant role in the execution of the project. The IPT works as a team of decision makers to achieve consensus on tasks related to guiding projects through the PPM [project planning and management] Life, Cycle."

Additionally, before executing the integrated baseline review,⁹ management did not ensure that the performance measurement baseline reflected the entire scope of work, documented at the appropriate level of detail. Therefore, OFCO was not able to fully incorporate the business needs of the program offices. Also, OFCO did not adequately coordinate with program offices on the data that would be converted. As a result, HUD management could not ensure that the conversion process followed by the contractor would provide successful data migration.

OCFO Did Not Establish an Effective Process for Approving Interface-Related Deliverables

OFCO did not track to whom deliverables were sent for review or complete reviews of the interface-related deliverables in a timely manner. The Project contract was executed September 23, 2010, and established the mechanism for approval of the Project in phases through the acceptance of contract deliverables. Based on that process, the Chief Financial Officer's government technical representative established a tracking spreadsheet for documenting receipt and approval or rejection of the contract deliverables. The Chief Financial Officer's government technical monitor was responsible for reviewing the documentation, determining who on the HUD staff needed to review and approve the documentation, and tracking that process to recommend either acceptance or rejection to the government technical representative. The government technical monitor did not track to whom documents were sent for review. Although required completion dates were established, HUD did not always accept or reject the submitted documents within the established review period.

A change control board¹⁰ was created to address concerns regarding Project completion within the base period, and in August 2011, interface specification approach documents were approved by the board to allow the contractor to begin to design the interfaces. OCFO approved the approach that would be applied to the design; however, design and specification documents were not approved

⁹ The integrated baseline review is a formal review or assessment of the contractor's performance measurement baseline. The review involves a discussion and evaluation of the performance measurement risks and management controls.

¹⁰ A change control board serves as the decision-making body for each program area project. The CCB is the control mechanism for the program office that has requested the need for which the project has been initiated. For ICFS, this included staff from OCFO and the Project contractor. (System Development Methodology, Section 1)

before the contractor began to develop the interface programs. HUD's system development methodology requires that the project sponsor "document completely and accurately activity results and decisions." The document further establishes a link between effective communication and coordination of activities throughout system development and indicates that effective communication is dependent on the complete and accurate documentation of decisions and activities leading up to decisions. Activities and decisions should not be considered complete until there is tangible documentation of the activity or decision.

OCFO Did Not Ensure That Data Converted Were Adequately Verified and Validated by a HUD Official or an Independent Verification and Validation Contractor

Mock conversions¹¹ 1 and 2 were completed in September and November 2011. However, the Project contractor was not able to grant OCFO officials' access to ICFS to verify the converted data until November 2011. HUD needed access to compare source data files and converted data electronically during the mock 1 and mock 2 conversions. As a result, HUD did not have sufficient time to identify and resolve issues of mock 1 and mock 2 conversions before moving forward with mock conversion 3.

Also, HUD did not comply with its project planning and management procedures to ensure that an approved independent verification and validation plan and test plan were in place before starting the data conversion process. Without verifying and validating converted data after each conversion cycle independently, HUD management could not ensure that all data were transferred to the new system accurately.

OCFO Did Not Ensure That the Project Contractor Complied With the Scope of the Conversion as Approved in the Conversion Plan

The contractor was required to convert 11 months of fiscal year 2011 financial data during the mock 1 conversion cycle. The Project contract states that "the Contractor shall design its conversion programs to convert HUD's historical, closed-item data." However, the contractor did not convert all of the fiscal year 2011 financial data that OCFO provided to it. OCFO management informed the OIG that the Project contractor did not do so because the software used for the new financial system was not ready and the contractor needed to focus on completing the software.

Because OCFO did not ensure that the Project contractor complied with the scope of the conversion, the contractor did not convert all data specified by the contract. OCFO was not able to verify the data or rectify any issues affecting a complete data conversion before continuing to the next mock conversion.

¹¹ According to the approved data conversion plan, the Project contractor was required to conduct three mock data conversions before the production conversion.

OCFO Was Not Consistent With the Interface Approach

ICFS was originally scheduled to go live in March 2012, and to meet that deadline, the contractor proceeded, although HUD had not approved contract deliverables that had been submitted. During a Project status meeting in May 2011, the contractor informed HUD that the status of the interface portion of the Project would be changed to a higher risk level if the interface design documents were not approved by the following day. This issue resulted in a review of the interface design documents submitted and a decision that the proposed designs needed to be revised in July 2011. The OCFO project manager met with the Deputy Assistant Chief Financial Officer for Systems and the contractors to revise the design of the interfaces and change the focus from application-based to transaction-based interfaces. The resulting modifications delayed the start of programming for the interfaces. Due to these changes, the Project contractor also requested that the go live date be changed to May 2012 and requested additional funding for the Project. In addition, contractor performed testing of the interfaces was limited to the portion of the interface that the contractor created. Additional testing of the complete interface will be required once the interfaces are completed.

OCFO Did Not Maintain a Consistent Project Management Philosophy

The final Project roadmap document, dated December 2005, included specific details regarding the actions that HUD needed to take to accomplish the Project on time, within budget and scope. The document specifically outlined

1. A project structure indicating that the Project affected all program, administrative, and support organizations within HUD and required their support, input, and resources to achieve the new ICFS on time, on budget, and within scope.
2. Actions that the project management team needed to accomplish related to the existing financial systems data.
3. The requirement to prepare for impacts on the legacy systems and interfaces by developing a maintenance contract update strategy and plan for all affected systems, working with procurement staff to issue or modify the legacy systems maintenance contracts to support Project requirements.
4. The inclusion of specific individuals with expertise for each interface to be developed and maintained.
5. The need to maintain a liaison with other HUD and external system owners and sponsors so that they could assess the impact on the Project.

These specifications listed in the roadmap set the parameters for a comprehensive Project management philosophy. However, HUD did not implement or maintain

this philosophy, as it did not implement the recommendations of the initial Project roadmap document or follow HUD's system development methodology requirements.

The recommendations that resulted from the initial phase of the Project were summarized in the document, "HUD's Financial Management Vision," issued in July 2005. The original Project vision called for the replacement of HUDCAPS, PAS¹², Hyperion,¹³ the Financial Data Mart,¹⁴ and the portions of the Line of Credit Control System (LOCCS)¹⁵ that related to core financial functions. The document included specific information regarding the justification for each application. It concluded that HUDCAPS, PAS, and LOCCS were not Office of Federal Financial Management¹⁶ compliant applications and that they ran on outdated technology that was costly to maintain. It also indicated that the reconciliation of HUDCAPS required an "extraordinary effort" from HUD staff to accomplish monthly and at year end and that the batch processing of financial transactions between PAS and HUDCAPS resulted in untimely financial information. In addition, the results of HUD's analysis concluded that the functionality provided by both Hyperion and the Financial Data Mart would be accomplished in a more efficient and integrated manner through replacement. As the project progressed after the contract was let, decisions were made that revised the scope of the Project to eliminate only the HUDCAPS and PAS applications. As a result, HUD would continue to rely on the LOCCS, Hyperion, and Financial DataMart applications and would decrease the amount of functionality it would use within the new core financial system product, Peoplesoft. This decision also meant that additional interfaces among these applications had to be created and maintained.

¹² PAS is an integrated subsidiary ledger for HUD's grant, subsidy, and loan programs. PAS maintains accounting records based on the receipt of funding authorizations from HUDCAPS, which generates transaction activity at different levels.

¹³ Hyperion is HUD's consolidated financial statement system. It captures, records, and summarizes HUD's financial results of operations across all business areas in accordance with the requirements defined by OMB, the U.S. Government Accountability Office, the U.S. Department of the Treasury, Congress, and HUD program offices to fulfill HUD's quarterly and annual Treasury reporting requirements.

¹⁴ The Financial Data Mart was created to provide a consolidated reporting environment of HUD's financial data to users to create ad hoc queries and reports for analysis and execute canned financial reports.

¹⁵ LOCCS supports OCFO and all HUD program offices in coordinating and controlling grant, loan, and subsidy disbursements. The system is the Chief Financial Officer's primary vehicle for cash management while monitoring disbursements according to the individual control requirements used by HUD program offices to ensure program compliance. LOCCS is both a payment control tool and a HUD post award financial grants management system. LOCCS is also the link that connects HUD's program management information systems to its program accounting data.

¹⁶ The Office of Federal Financial Management exists within OMB and is responsible for the financial management policy of the Federal Government. Its responsibilities include implementing the financial management improvement priorities of the President, establishing government wide financial management policies of executive agencies, and carrying out the financial management functions of the Chief Financial Officers Act of 1990.

Through fiscal year 2008, HUD spent \$12.3 million on the initiation of the Project and development of the Project vision, requirements definition, transition support, and request for proposal technical evaluation assistance. Through May 2012, including the initial \$12.3 million, HUD had spent more than \$35 million (see appendix B) on implementation tasks to get the Project to go live. As part of this process, Project documentation detailing data requirements, functional requirements, legacy system disposition, and Project plans moving forward were developed. The decisions HUD made regarding the implementation of ICFS were not in line with the original plan and modified the amount of work the contractor was expected to accomplish within the contract base period.

Conclusion

OCFO did not update the original scope of the Project or implement the recommendations of the initial Project roadmap to ensure that the Project was ready to move forward before the contract was executed. HUD did not fully embrace its authority under the Chief Financial Officers Act of 1990, follow HUD's system development methodology requirements, or effectively communicate with the other affected system owners. In addition, OCFO did not formally assign a specific individual to be responsible for the interface portion of the Project, use integrated project teams to make decisions, establish an adequate contract deliverable review process, or establish an interface approach early in the process. It essentially left control of the Project to the contractor. As a result, HUD does not have an operational new core financial system, and more than \$35 million was spent on a project that is not operational. Additional time and funding will be needed to complete the Project.

As HUD assesses the future of the Project, it is clear that it is in jeopardy and that additional time and funding will be needed to complete the implementation of ICFS. A decision to abandon the Project and maintain HUDCAPS will result in \$35 million being lost and additional funding will be required to upgrade HUDCAPS. While HUD is making decisions on the Project and its approach, additional money is being spent to maintain the applications and interfaces that ICFS was suppose to replace. A decision to modify either the contractor or the software application would also result in the loss of money spent and the need for additional funding. As the decisions regarding the Project are contemplated, HUD needs to ensure that the Project is properly planned and managed, that the objectives of the department are met and that any additional funding spent towards the Project is appropriate and progressive.

Recommendations

We recommend that the Deputy Secretary:

- 1A. Ensure that revisions are made to the contractor performance work statement moving forward on the Project to ensure its accuracy regarding the work to be accomplished.
- 1B. Complete the required modifications in the maintenance contracts for program office systems that interface with ICFS to ensure that the Project can move forward smoothly.
- 1C. Establish a performance measurement baseline for each mock conversion cycle.
- 1D. Ensure that the HUDCAPS application remains available for program office use until a replacement application is complete or an adequate work-around is established.
- 1E. Assign specific individuals to be responsible for each of the interfaces within the Project moving forward.
- 1F. Establish integrated project teams to review the interface specifications and designs to ensure that they are in line with programmatic and technical requirements.
- 1G. Reevaluate the document approval process for the Project; establish a mechanism to ensure that Project approvals are provided by the suitable level of management; and confirm a continued commitment to the Project scope, direction, and resource requirements.
- 1H. Reevaluate the interface approach and design documents to ensure that timely approvals are made regarding the interfaces in line with the Project scope, direction, and resource requirements.
- 1I. Ensure that complete end-to-end testing of the interface processes is completed.
- 1J. Verify that all fiscal year 2011 data are properly converted in the new system and the conversion scope requirements are met as stated in the contract.
- 1K. Ensure that the new independent verification and validation contractor develops and approves a verification and validation plan and test plan before conducting the revised conversion process.
- 1L. Ensure that future information technology projects managed by OCFO require that converted data be verified by HUD officials or an independent verification and validation contractor before the beginning of the next conversion cycle.

SCOPE AND METHODOLOGY

The audit was performed between February and June 2012 at HUD headquarters, Washington, DC. Data reviewed were for the period 2004, the initiation of the Project, to July 2012, after the base period of the contract ended. Our overall objective was to evaluate whether HUD was ready to move forward with the full implementation of ICFS. Specifically, we reviewed data conversion activities and interface plans and procedures for the new ICFS application to determine whether they were designed and built as intended so that all pertinent data would be extracted, free of errors and omissions, and accurately transferred. To accomplish our objective, we

- Used OMB Circular A-127, HUD's system development methodology, the Chief Financial Officers Act of 1990, HUD acquisition regulations, the Office of the Chief Information Officer's Integrated Review Baseline Guide, and HUD's project planning and management life cycle procedures as guidance.
- Conducted interviews with staff and contractors from OCFO and the Office of the Chief Procurement Officer and reviewed the Project contract.
- Obtained an understanding of the interface requirements, data conversion specifications, and the Project deliverable and approval process.
- Reviewed the contract and supporting documentation for planned interfaces and data conversion methodologies.

We conducted the audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

INTERNAL CONTROLS

Internal control is a process adopted by those charged with governance and management, designed to provide reasonable assurance about the achievement of the organization's mission, goals, and objectives with regard to

- Effectiveness and efficiency of operations,
- Reliability of financial reporting, and
- Compliance with applicable laws and regulations.

Internal controls comprise the plans, policies, methods, and procedures used to meet the organization's mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations as well as the systems for measuring, reporting, and monitoring program performance.

Relevant Internal Controls

We determined that the following internal controls were relevant to our audit objective:

- Up-to-date written policies and procedures to ensure that data conversion and interfaces were complete and valid,
- Compliance with Federal requirements, and
- Design and implementation of policies and procedures.

We assessed the relevant controls identified above.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, the reasonable opportunity to prevent, detect, or correct (1) impairments to effectiveness or efficiency of operations, (2) misstatements in financial or performance information, or (3) violations of laws and regulations on a timely basis.

Significant Deficiency

Based on our review, we believe that the following item is a significant deficiency:

- OCFO did not properly plan and manage the application interfaces and data conversion portions for the implementation of ICFS.

APPENDIXES

Appendix A

AUDITEE COMMENTS AND OIG'S EVALUATION

Ref to OIG Evaluation

Auditee Comments

Comment 1


U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
THE DEPUTY SECRETARY
WASHINGTON, DC 20410-0001

December 7, 2012

TO: Randy W. McGinnis, Assistant Inspector General for Audit, GA

FROM: Maurice A. Jones, Deputy Secretary, SD *Maurice A. Jones*

SUBJECT: Review of the Data Conversation Activities and Interface Plans and Procedures for the Implementation of HUD's Integrated Core Financial System

Thank you for sharing the results of the audit on the implementation of our Integrated Core Financial System. Based on an assessment of our strategic options for moving forward, including the invaluable advice of you and your team, we decided to explore a Shared Services approach with the Bureau of Public Debt, BPD. We are in the Discovery Phase with BPD, the goal of which is to develop a plausible plan to implement HUD as a full service customer, assuming this solution makes sense for us. If not, the deliverable will be a plan to implement the agreed upon services that makes sense for HUD. The deliverable will include a potential pilot component, implementation approach and timeline. To insure the success of this project we are involving subject matter experts from program and support offices early in the process, matching the project deliverables with HUD's capacity (6-9 month deliverables) vs. one large deliverable, and utilizing our PPM structure while incorporating BPD's project documents. We plan to continue the involvement of your team in our journey.

If you have additional questions for me on this, please don't hesitate to contact me. I look forward to working with you further on this.

cc:
David Sidari, Chief Financial Officer, F
Jerry Williams, Chief Information Officer, Q
Jemine Bryon, Chief Procurement Officer, N
Karen McBride, Senior Policy Analyst, FA
Eunice Dawkins, Audit Liaison Officer, SD
Barbra Elliott, Senior Advisor, SD

Comment 1

OIG Evaluation of Auditee Comments

Comment 1

We appreciate the update for the moving forward strategies.

Appendix B

TOTAL PROJECT COST FROM FISCAL YEARS 2003 to 2012

Total Project cost from fiscal years 2003 to 2012	
<u>Project cost description</u>	<u>Development, modernization, and enhancement</u>
Project vision	\$1.0
Project initiate	\$0.7
Requirements definition	\$9.5
Transition support	\$0.5
Request for proposal technical evaluation assistance	\$0.6
Total actual costs for fiscal years 2003 to 2008	\$12.3
18-month Project base period for actual implementation tasks for ICFS (September 2010-March 2012) (Federal Housing Administration subsidiary ledger and ICFS)	\$23.0
Total cost as of May 2012	\$35.3

Notes:

1. Cost is in millions of dollars.
2. No cost was incurred in fiscal year 2009 due to a protest to the contract.

Appendix C

HIFMIP Timeline from 2004 to 2012

