AUDIT REPORT



REAL ESTATE ASSESSMENT CENTER OFFICE OF PUBLIC AND INDIAN HOUSING

WASHINGTON, DC

The Center's Physical Condition Assessment Was Compromised

2006-CH-0001

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OFFICE OF AUDIT, REGION V CHICAGO, ILLINOIS



Issue Date

November 30, 2005

Audit Report Number 2006-CH-0001

TO: Elizabeth Hanson, Deputy Assistant Secretary for Real Estate Assessment

Center, PX

FROM: Heath Wolfe, Regional Inspector General for Audit, 5AGA

SUBJECT: The Real Estate Assessment Center's Physical Condition Assessment Was

Compromised

HIGHLIGHTS

What We Audited and Why

We reviewed the U. S. Department of Housing and Urban Development's (HUD) Real Estate Assessment Center's (Center) housing inspections, and oversight and controls over its housing inspection process. We initiated the review based on our 2005 annual audit plan and our strategic plan to help HUD improve the execution of its fiscal responsibilities. Our objective was to determine whether the Center had adequate controls to safeguard the integrity of its housing inspection data.

What We Found

Unauthorized persons accessed HUD's confidential information. Controls and procedures for securing the Center's housing information after a download and before the upload of inspection data were not in place to assure that only authorized users accessed confidential information and that authorized users did not provide their identifications and passwords to unauthorized persons. We informed the Center's deputy assistant secretary of minor deficiencies through a memorandum, dated November 22, 2005.

What We Recommend

We recommend that the Center's deputy assistant secretary implement procedures and controls over the physical assessment subsystem to correct the deficiencies addressed in this report.

For each recommendation without a management decision, please respond and provide status reports in accordance with HUD Handbook 2000.06, REV-3. Please furnish us copies of any correspondence or directives issued because of the audit.

Auditee's Response

We provided our discussion draft audit report to the Center's deputy assistant secretary and HUD's staff during the review. We held an exit conference with the Center's deputy assistant secretary on October 27, 2005.

We asked the Center's deputy assistant secretary to provide written comments on our discussion draft audit report by November 8, 2005. The deputy assistant secretary provided written comments dated November 8, 2005. The deputy assistant secretary disagreed with our finding and recommendations. The complete text of the written comments, along with our evaluation of those comments, can be found in appendix A of this report.

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BACKGROUND AND OBJECTIVES

The Real Estate Assessment Center (Center). The Center was established in March 1998 to oversee the U.S. Department of Housing and Urban Development's (HUD) property portfolio. The Center has an important mission to improve the quality of HUD's housing stock by providing timely and accurate assessments of its real estate portfolio. It administers HUD's physical inspection program using the uniform physical condition standards.

The Center's physical inspection program. The program is based on the uniform physical condition standards and a computer-driven physical inspection protocol. The computer-driven protocol is maintained in a hand-held data collection device. Contract inspectors use the collection device to verify property information and record deficiencies. When an inspection is completed, the information is electronically transmitted to the Center for verification and calculation. There is no source documentation of this process to support the data entered by the inspector, and the inspector has no knowledge of a property's score.

The Center's rules of behavior. The Center established its July 2004 security plan rules of behavior which indicates an active involvement in implementing and maintaining policies and procedures to keep the Center's systems secure from unauthorized access and inappropriate use. Access to the systems is limited to users (e.g., HUD employees, contractors, clients/customers, and program participants) who have a need to use the information resources. Recipients are required to understand and abide by the Center's physical assessment subsystem security policies and procedures to safeguard valuable information resources. Noncompliance will be disciplined through sanctions. The system owner is responsible for ensuring that an adequate level of protection is afforded to the subsystem through an appropriate implementation of technical, operational, and managerial security controls. System users are responsible for the protection of passwords, information, equipment, systems, networks, and communication pathways to which they have access. All HUD computer resources including hardware, software, programs, files, paper reports, and data are the sole property of HUD. The Web access security system user identification and password issued are to be used solely in connection with the performance of a user's responsibilities in support of HUD's mission and may not be used for personal or private gain. Users agree to be responsible for the confidentiality of the assigned information and accountable for all activity with the user identification number. Further, the user agrees not to provide this confidential user identification and password to another user during employment and upon leaving the employment of HUD. User passwords and identifications are for individual use only and are confidential HUD information. Users are given access to the system based on a need to perform specific work. They should only access the information for which they are authorized and will be held accountable for their actions while accessing the system. Participants agree to comply with the requirements as a condition of being granted limited access to the Center's computer resources.

Our objective was to determine whether the Center had adequate controls to safeguard the integrity of its housing inspection data.

RESULTS OF AUDIT

Finding: The Center's Physical Condition Assessment System Was Compromised

Confidential information maintained in the Center's system was accessed by unauthorized persons for inappropriate use without the Center's knowledge. A HUD-contracted inspector provided his password and a property's identification number to an unauthorized person. The unauthorized person drew a sample of housing authority units before the inspector's scheduled inspection without the Center's knowledge. The Center's controls and procedures for securing its information after a download and before the upload of the inspection were not sufficient to assure that only authorized users had access to HUD's confidential information. As a result, HUD may not be getting an accurate assessment of the physical condition of its inventory.

The Center Needs to Improve Its Controls over the Physical Condition Assessment System

A HUD-contracted inspector provided his official access password so an unauthorized housing authority consultant could access the Center's confidential information. Without the Center's knowledge, the consultant downloaded a list of units scheduled to be inspected before the inspection. The consultant had the units on the list preinspected and repairs made as needed in preparation for HUD's annual physical inspection. As a result, HUD cannot be assured that it received an accurate assessment of the physical condition of the units.

HUD's contracted inspectors receive a password and property identification number allowing the inspector access to download HUD's confidential information. Once the property information is downloaded, the Center has no controls over the sharing of the information, the transferring data to multiple medias or the number of times the property information is downloaded.

Identification numbers included in the task orders and provided to the contractors allow access to download a property's profile. HUD contractors receive a task order 30 days before the quarter and approximately four months in advance of inspections for scheduling purposes. The contractors assign properties for inspection to a contracted inspector, at which time the property profile to be used during inspections can be downloaded on an inspector's personal computer. Data collection device software allows an inspector to download a property profile and perform inspections on the inspector's personal computer. With the profile downloaded, the information can be transferred to a disk or multiple computers. There is nothing to prevent multiple downloads and once the information is downloaded, the Center has no controls over the sharing of the information. The Center transfers responsibility for the protection of passwords, information, equipment, systems, networks, and

communication pathways to the inspectors. Inspectors are also responsible for the confidentiality of the information and accountable for all activity.

As part of the inspection process, an inspector downloads and then verifies the property's profile before a sample is generated for inspection. All information is collected in the Center's system based on the internal clock of the inspector's computer. The date/time stamp will reflect the current date/time from an inspector's computer when the sample is generated. The software used to perform the inspections does not have an internal clock of its own, and it is possible for the date/time stamp of the internal clock of an inspector's computer to be manipulated. Reports generated after inspection, which are transferred to the subsystem, will reflect the date and time stamp from an inspector' computer. Numerous samples can be generated, or one sample can be maintained and retrieved at a later date. If numerous samples are generated, the previous date/time stamp information is overwritten in the Center's database. Providing the property profile does not change, the system can duplicate and/or mirror the same sample. All saved information will remain unchanged, and the date/time stamp information will not be affected, as it is a record within the database.

The Center's protocol and standards of operation do not require its quality assurance inspectors to review/verify the date/time stamp information during site inspections. Moreover, the Center only has real time knowledge of when a property profile is downloaded and the completed inspection is uploaded to the subsystem. Controls and procedures for securing HUD's information after a download and before the upload of the inspection were not in place to assure that only authorized users accessed confidential information and that authorized users did not provide their identifications and passwords to unauthorized persons, thereby allowing them access to HUD's confidential information. The Center established its July 2004 security plan rules of behavior, indicating an active involvement in implementing and maintaining policies and procedures to keep the Center's systems secure from unauthorized access and inappropriate use. However, the Center lacked sufficient controls to ensure its established plan was implemented.

Without sufficient controls over access, HUD lacks assurance that the Center's mission to improve the quality of HUD's housing stock by providing timely and accurate assessments of its real estate portfolio will be achieved.

Recommendation

We recommend that the deputy assistant secretary for the Center

1A. Implement procedures and controls over the physical assessment subsystem to correct the deficiencies addressed in this finding including, but not limited to: (1) an internal clock for REAC's database inspection software to record and maintain the times that access is obtained to a property profile and an inspection sample was generated, and (2) a quality assurance process that reviews the access and generated sample times.

SCOPE AND METHODOLOGY

We performed our review at the Center in Washington, DC from January 18 through March 11, 2005. We extended our scope period as necessary. To accomplish our objective, we interviewed HUD's staff for the Center and the Office of Multifamily Housing.

To determine whether HUD's requirements were followed, we reviewed the Center's

- Public Indian Housing Real Estate Assessment Center's July 2004 system security plan rules of behavior,
- Uniform physical condition standards,
- Mission statement.
- Evaluations of contract administrators and contracted inspectors,
- Reports issued by the U.S. Government Accountability Office and Louis Berger Group, Inc.,
- Healthy Home Issues: Mold, External Review Draft, version 2, dated October 2, 2001,
- Organizational chart, and
- List of inspection results for properties inspected between February 1 and March 3, 2005, including properties scheduled for a reinspection and/or quality assurance review.

We also reviewed 24 CFR [Code of Federal Regulations] Parts 5 and 200, HUD Handbook 4350.5, and Title 18 of the *United States Code*, Section 1030.

Additionally, we generated a sample for and inspected two properties recently inspected by a contract inspector and a quality assurance inspector and attended the Center's uniform physical condition standards training.

The review covered the period from January 1 through December 31, 2004. This period was adjusted as necessary. We performed our review in accordance with generally accepted government auditing standards.

INTERNAL CONTROLS

Internal control is an integral component of an organization's management that provides reasonable assurance that the following objectives are being achieved:

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

Internal controls relate to management's plans, methods, and procedures used to meet its mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance.

Relevant Internal Controls

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

- Program operations Policies and procedures that management has implemented to reasonably ensure that a program meets its 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.
- Compliance with laws and regulations Policies and procedures that management has implemented to reasonably ensure that resource use is consistent with laws and regulations.
- Safeguarding resources Policies and procedures that management has implemented to reasonably ensure that resources are safeguarded against waste, loss, and misuse.

We assessed the relevant controls identified above.

A significant weakness exists if internal controls do not provide reasonable assurance that the process for planning, organizing, directing, and controlling program operations will meet the organization's objectives.

Significant Weakness

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

• The Center lacked sufficient controls to ensure its established security plan was implemented (see finding).

Appendix A

AUDITEE COMMENTS AND OIG'S EVALUATION

Ref to OIG Evaluation

Comment 1

Auditee Comments



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT 550 12th Street, S.W., Suite 140 WASHINGTON, OC 20410-5000

OFFICE OF MUBLIC AND INDIAN HOUSIN

November 8, 2005

MEMORANDUM FOR: Heath Wolfe, Regional Inspector General for Audit, 5AGA

FROM: Elizabeth Hanson, Deputy Assistant Secretary for the Real Estate Assessment
Center PX

SUBJECT: Draft Audit Report

I have read the Draft Audit Report submitted by your office regarding the review done of the Department's Uniform Physical Conditions Standard (UPCS) used in the inspection of both multifamily and public housing properties. Based upon your review, you identified one finding: The Center's Physical Condition Assessment System was Compromised. This finding was based upon a single alleged act of fraud, committed by one of the contract inspectors. This alleged act of fraud was identified by REAC and immediately referred to the Department's Office of Inspector General for Investigation and REAC has fully cooperated with that office. The final results of their investigation are not available at this time.

It should also be noted that upon our knowledge of this act, the individuals involved were quickly referred to the Departmental Enforcement Center for imposition of sanctions. All of the individuals were immediately suspended. The housing authority employees involved have entered into voluntary exclusion agreements and debarment proceedings are still pending against the inspector. I would appreciate it if the final audit report included information so that the reader would be informed that the source of the finding was from the efforts of the REAC staff.

While I am very concerned over this isolated incident, and made certain that staff fully cooperated with the authorities investigating it, I am also concerned that this one case of alleged fraud has been generalized into a perceived data integrity problem within the system.

Inspectors must have the ability to download inspections prior to inspection day in order to verify information about the property beforehand and to properly plan their time. Inspectors must also have the ability to download the property information more than once in the event of technical difficulties, scheduled date changes or changes in HUD data.

The Audit report states that "controls and procedures for securing the Center's housing information after a download and before the upload of inspection data were not in place to assure

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Auditee Comments

that only authorized users accessed confidential information and that authorized users did not provide their identifications and passwords to unauthorized persons". I believe, that as currently designed, the controls and procedures for securing REAC's housing information are within the normal parameters for managing risk. The fact that REAC staff detected the fraud, which is the subject of the draft report, is evidence of this.

Recommendations:

- 1.A. Implement procedures and controls over the physical assessment subsystem to correct the deficiencies addressed in this finding, including but not limited to:
 - An access code for obtaining a property profile information and a different access code for generating an inspection sample.

Based upon the isolated incident that is discussed in this audit report, implementing this recommendation would not have prevented the alleged fraudulent use of an inspector's identification and password. If an inspector was willing to violate the procedures and provide his access code for obtaining a property profile, there is no reason to believe that he would not also be willing to supply the second access code to generate the inspection sample. Consequently, please remove this suggestion from the final audit report recommendation.

An internal clock for REAC's database inspection software to record and maintain the times that access is obtained to a property profile and an inspection sample was generated.

The current software does record when the property profile was downloaded and when the inspection sample was generated. The Department has been involved in a complete re-design of the physical inspection software for the past year and one improvement is that each sample generation process will yield different units to be inspected. Just like the current version, the system will capture timestamp data to document when the inspector generated the sample. Consequently, please remove this suggestion from the final audit report recommendation. Therefore, I request that you do not include this recommendation in the final audit report.

 Impose penalties for exceeding authorized access to, alterations to, damage to, or destruction of information on the subsystem

The new software will limit the number of times an inspector can download the physical inspection profile. If an inspector has to exceed the limit, they will be required to contact REAC and provide a legitimate reason for exceeding the limit. Only designated REAC personnel will be able to adjust the system settings to enable the inspector to exceed the limit. As demonstrated in the on-going investigation of the allegation of fraudulent behavior on the part of a contract inspector, there are sufficient penalties available through the rule of law to deal with fraudulent activities. Consequently, please remove this suggestion from the final audit report recommendation. Therefore, I request that you do not include this recommendation in the final audit report.

Comment 2

Comment 3

Comment 4

Auditee Comments

The draft Audit Report contains a conclusion that I believe is unsubstantiated and a gross exaggeration of the physical inspection process and risks involved. That statement is, "As a result, HUD may not be getting an accurate assessment of the physical condition of its' inventory." The Department has processed over 145,000 inspections over the past nine years and to impugn the inspection process and resulting data by virtue of one alleged fraudulent action is troubling.

While I understand that the GAO Government Auditing Standards require that auditors should report all significant instances of noncompliance and all significant instances of abuse that were found during or in connection with the audit, one instance out of 145,000 is not sufficient evidence to require major system changes. The one instance was dealt with promptly and no evidence was presented that the issue was systemic.

I take the inspection process and its data integrity scriously. REAC has, and will continue to employ, processes and procedures that identify and prevent fraudulent inspections and data tampering whenever possible. In the design of the inspection software over the past year, REAC has identified improvements to the software and processes that I believe will provide increased security over the data. However, no amount of procedures or data system checks will prevent all fraud attempts. Consequently, I ask that you delete the sentence, "As a result, HUD may not be getting an accurate assessment of the physical condition of its inventory," from the report.

In conclusion, because none of proposed audit recommendations are sustainable, I ask that you issue the report without recommendations and close it upon issuance as no management plans to implement the recommendations will be provided.

OIG Evaluation of Auditee Comments

- **Comment 1** The Center did not become aware of the unauthorized access to its physical assessment subsystem until notified by HUD's Hartford Field Office director.
- **Comment 2** We agree with this statement and revised the recommendation.
- Comment 3 As described to us during our review, the current software only records the latest property profile download and inspection sample generation. The current software does not maintain a record of all times that the property profile was downloaded or inspection samples were generated. The new software implementation, scheduled to be employed when the Center's reverse auction program began in July 2005, was postponed and is now scheduled to be implemented in August 2006.
- **Comment 4** We removed this recommendation.