

AUDIT REPORT

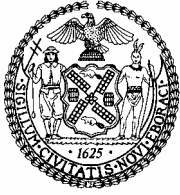


CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BUREAU OF FINANCIAL AUDIT
WILLIAM C. THOMPSON, JR., COMPTROLLER

Audit Report on the User Access Controls of the New York City Housing Authority's Tenant Selection System and Tenant Selection and Assignment Plan System

7A04-138

June 30, 2006



THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
1 CENTRE STREET
NEW YORK, N.Y. 10007-2341

WILLIAM C. THOMPSON, JR.
COMPTROLLER

To the Citizens of the City of New York

Ladies and Gentlemen:

In accordance with the responsibilities of the Comptroller contained in Chapter 5, §93, of the New York City Charter, my office has audited the user access controls of the New York City Housing Authority's Tenant Selection System and Tenant Selection and Assignment Plan System.

These computer systems are designed to ensure that applicants certified as eligible for New York City Housing Authority housing are placed on a specific development's waiting list and offered housing, in turn, when it becomes available. We audit such City programs to ensure that they are administered fairly and comply with all related rules and regulations.

The results of our audit, which are presented in this report, have been discussed with officials of the New York City Housing Authority, and their comments have been considered in preparing this report. Their complete written responses are attached to this report.

I trust that this report contains information that is of interest to you. If you have any questions concerning this report, please e-mail my audit bureau at audit@Comptroller.nyc.gov or telephone my office at 212-669-3747.

Very truly yours,

William C. Thompson, Jr.

WCT/fh

Report: 7A04-138

Filed: June 30, 2006

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***The City of New York
Office of the Comptroller
Bureau of Financial Audit
EDP Audit Division***

**Audit Report on User Access Controls of the
New York City Housing Authority's
Tenant Selection System and
Tenant Selection Assignment Plan System**

7A04-138

AUDIT REPORT IN BRIEF

Our office performed an audit on the user access controls of the New York City Housing Authority's Tenant Selection System and Tenant Select and Assignment Plan System. The goal of the New York City Housing Authority (NYCHA) is to provide decent and affordable housing in a safe and secure living environment to low- and moderate-income residents throughout the five boroughs. NYCHA screens the application, assigns a priority code based upon the information provided by the applicant, and enters the applicant's information on NYCHA's preliminary waiting list—the Housing Authority Tenant Selection (HATS) system. When an applicant is “certified” as eligible for NYCHA housing, this data is manually entered into the Tenant Selection and Assignment Plan (TSAP) system.

Audit Findings and Conclusions

The HATS and TSAP systems are not integrated, which makes it difficult for NYCHA to reconcile differences in applicant information and other data in the systems. The lack of system integration and data reconciliation between the two systems may allow for manipulation of the data so that ineligible applicants could be deemed eligible and placed in NYCHA housing. Further, the audit found 3,920 instances in which applicants listed as certified in HATS should have appeared on the TSAP database but did not. This raises the possibility that eligible applicants might not have been offered NYCHA housing when it was available for them.

Additionally, we found a number of operational and application control weaknesses that may expose both systems to unauthorized access; however, our audit found no instances of unauthorized access to the HATS and TSAP systems. Among specific weaknesses were: NYCHA did not terminate the HATS and TSAP accounts of some former employees; there are no formal procedures to ensure that each active HATS user has only the necessary access and

user privileges required to complete the designated tasks for that user's job functions; and the HATS audit logs do not indicate the user IDs of employees who are allowed to make data changes. In addition, our audit found that NYCHA lacks formal procedures for making and documenting program changes to the TSAP system.

NYCHA responded that the discrepancies between the HATS Master File and TSAP Referral File primarily resulted from data-entry errors. However, considering the previously mentioned lack of controls and other weaknesses, we cannot presume that the discrepancies were made inadvertently. Further, the error rates as described later in this report range up to ten percent. Error rates of this magnitude diminish NYCHA's ability to provide housing opportunities fairly and equitably to all who are eligible.

Audit Recommendations

To address these issues, we recommend that NYCHA:

- Create an electronic interface that would allow information from HATS to be sent to TSAP and also allow for system reconciliation.
- Review and correct the items mentioned in this report for both systems to ensure that the information in HATS and TSAP are consistent.
- Ensure that it terminates the access privileges of employees who have inactive HATS and TSAP accounts, as well as those of all former employees.
- Create a formal procedure for HATS that ensures the approved review of user privileges.
- Ensure that HATS audit logs identify the user ID of the person making changes to the system.
- NYCHA should create written procedures to ensure that only appropriate, authorized changes are made to TSAP application and system software.

INTRODUCTION

Background

The goal of the New York City Housing Authority (NYCHA) is to provide decent and affordable housing in a safe and secure living environment to low- and moderate-income residents throughout the five boroughs. NYCHA is the largest public housing authority in the United States. To fulfill its mission, NYCHA must preserve its aging housing stock through timely maintenance and modernization of its developments. NYCHA works to enhance the quality of life of the residents at its facilities by offering them opportunities to participate in community, educational, and recreational programs, as well as job-readiness and training initiatives. NYCHA's Conventional Public Housing Program serves approximately 417,328 authorized residents in 181,581 apartments in 345 public housing developments throughout the City.¹

To be considered for an apartment in a public housing development, an applicant must complete and submit an application. NYCHA screens the application, assigns a priority code based upon the information provided by the applicant, and enters the applicant's information on its preliminary waiting list—the Housing Authority Tenant Selection (HATS) system. Applicants are scheduled for eligibility interviews according to the anticipated availability of apartments and the priority code assigned to the application during the application screening process. Those interviews are held in borough offices of NYCHA's Department of Housing Applications (DHA). All interviews are scheduled automatically by HATS, except those with high priority applicants, applicants who respond to outreach efforts for apartments in hard-to-fill developments, and working-family applicants who agree to consider apartments in lower-income developments.² Those interviews are scheduled manually by NYCHA personnel.

An applicant's movement through the application and selection process is tracked by the applicant's social security number, which is stored in the HATS system along with all other applicant information. When an applicant is "certified" as eligible for NYCHA housing, this data is manually entered in the Tenant Selection and Assignment Plan (TSAP) system. When an apartment in a development becomes available, TSAP automatically selects the next applicant on that development's waiting list based on the applicant's priority rating, application certification date, and apartment-size needs. High-priority applicants are assigned to a waiting list for their borough of preference. Working families and non-emergency need-based applicants are assigned to a waiting list for a housing development they select from a list of developments in their borough of preference that have anticipated vacancies.

¹ As of July 20, 2005

² Homeless persons referred by City agencies, victims of domestic violence, and intimidated witness are considered high priority.

Objectives

The audit's original objective was to determine whether NYCHA has adequate application, access, and operational controls in place to protect HATS and TSAP records from unauthorized access. The objective was expanded so that it could also be determined whether:

- applicant information and cases were appropriately transferred to TSAP;
- both systems contain the same critical applicant information;
- HATS certified applicants were actually placed or were shown on the TSAP system as actively awaiting placement; and
- all applicants that were placed or were shown on the TSAP system as actively awaiting placement appeared on the HATS system.

Scope and Methodology

Our fieldwork was conducted from April 2, 2004, through February 15, 2005. In addition, in September 2005, we requested that DHA resolve discrepancies that were identified during our testing.

To achieve our audit objectives we:

- interviewed NYCHA officials and conducted a walk-through of the HATS and TSAP systems;
- reviewed and analyzed NYCHA's mainframe, UNIX, and LAN security procedures;
- extracted key data elements from the HATS Master File, the TSAP Referral File, and the TSAP Apartment File databases and performed data integrity and other tests. These tests included evaluating data relationships, identifying record gaps, assessing completeness of information, and determining overall reliability of the data.
- reviewed HATS's and TSAP's security and system-related documentation;
- reviewed HATS's and TSAP's user access privileges; and
- tested the records on the HATS Master File, the TSAP Referral File, and the TSAP Apartment File for application and production date of January 19, 2005.

Using NYCHA status codes, our testing of the HATS Master File, which contained 224,267 applicant records, identified 39,050 applicants who were certified as eligible for

NYCHA housing. Our examination of the TSAP's Referral File, however, identified 56,426 applicants who had been designated as certified and thus eligible for NYCHA housing. Of those applicants, 22,335 had been placed in NYCHA housing.

Various tests were performed on the certified-as-eligible applicant records in the HATS Master File and the records in the TSAP Referral File to identify any discrepancies between the files. The differences found between the data stored in the two systems are discussed later in this report.

The Comptroller's Internal Control and Accountability Directive #18, "Guidelines for the Management, Protection and Control of Agency Information and Information Processing Systems" (Directive #18); the National Institute of Standards and Technology's (NIST's) "Generally Accepted Principles and Practices for Securing Information Technology Systems"; the "Federal Information Processing Standards" (FIPS); and the Department of Investigation's Citywide Information Security Architecture, Formulation and Enforcement, "Information Security Directive" (DOI Directive) were used as criteria for this audit.

This audit was conducted in accordance with generally accepted government auditing standards (GAGAS) and included tests of the records and other auditing procedures considered necessary. This audit was performed in accordance with the audit responsibilities of the City Comptroller, as set forth in Chapter 5, §93, of the New York City Charter.

Discussion of Audit Results

The matters covered in this report were discussed with NYCHA officials during and at the conclusion of this audit. A preliminary draft report was sent to NYCHA officials and discussed at an exit conference held on March 15, 2006. On April 5, 2006, we submitted a draft report to NYCHA officials with a request for comments. We received a written response from NYCHA on April 19, 2006. In its response, NYCHA acknowledged that both systems are not integrated, while stating that only TSAP is used when selecting an applicant for an apartment vacancy, and those discrepancies in HATS would not affect an applicant's placement on the development waiting list. NYCHA agreed that the errors cited in the report exist, but suggested that those errors represent a very low percentage of the records entered in the systems over a three year period. Finally, NYCHA indicated that it is fully committed to continuously monitor data entry to diminish the potential for any error.

NYCHA stated in its response that "over the last year NYCHA has been very active in a massive re-engineering technology initiative that will significantly enhance the efficiency of the current application process." Moreover, NYCHA agreed with our recommendation to improve the linkage between the two systems. In that regard, in March 2006 NYCHA released a comprehensive proposal to address the findings cited in our draft audit report, only after we had completed fieldwork and requested resolution to the audit's findings.

The full text of NYCHA's comments is included as an addendum to this report.

FINDINGS AND RECOMMENDATIONS

The HATS and TSAP systems are not integrated, which makes it difficult for NYCHA to reconcile differences in applicant information and other data in the systems. The lack of system integration and data reconciliation between the two systems might allow for manipulation of the data so that ineligible applicants could be deemed eligible and placed in NYCHA housing. Further, the audit found 3,920 instances in which applicants listed as certified in HATS should have appeared on the TSAP database, but did not. This raises the possibility that eligible applicants might not have been offered NYCHA housing when it was available for them.

Additionally, we found a number of operational and application control weaknesses that may expose both systems to unauthorized access; however, our audit found no instances of unauthorized access to the HATS and TSAP systems. Among specific weaknesses were: NYCHA did not terminate the HATS and TSAP accounts of some former employees; there are no formal procedures to ensure that each active HATS user has only the necessary access and user privileges required to complete the designated tasks for that user's job functions; and the HATS audit logs do not indicate the user IDs of employees who are allowed to make data changes. Our audit also found that NYCHA lacks formal procedures for making and documenting program changes to the TSAP system.

NYCHA responded that the discrepancies between the HATS Master File and TSAP Referral File primarily resulted from data-entry errors. However, considering the previously mentioned lack of controls and other weaknesses, we cannot presume that the discrepancies were made inadvertently. Further, the error rates as described later in this report range up to ten percent. Error rates of this magnitude diminish NYCHA's ability to provide housing opportunities fairly and equitably to all who are eligible.

Lack of System Integration

The HATS and TSAP systems and their databases are not integrated. As a result, information in the two systems cannot be easily reconciled. This lack of system integration leaves the systems susceptible to manipulation so that ineligible applicants could be deemed eligible and placed in NYCHA housing. An applicant's movement through the process is tracked by the applicant's social security number, which is stored in the HATS system along with all other applicant information. Subsequently, when an applicant is certified as eligible for NYCHA housing that data is manually entered into TSAP.

Our tests of the databases of the two systems found 67 active applicants who appear on TSAP's waiting list; although there is no record that those applications were first processed in HATS. Since the determination of applicants' eligibility begins on the preliminary waiting list established in the HATS system, we cannot be assured that those 67 applicants are actually eligible for NYCHA housing. In addition, we found 136 uncertified applicants with "active" status in TSAP, indicating that those applicants were on a rental waiting list. Since these 136 applicants were designated as uncertified, according to NYCHA regulations they were not

eligible for housing and their names should not have been placed on a rental waiting list. Moreover, we found five certified applicants in the HATS systems with a N8 priority code, indicating that these applicants should not need housing. However, those five applicants had an “active” status in TSAP.

During the exit conference, NYCHA officials asserted that those five HATS applicants had been erroneously classified with an “N8” priority code in the January 19, 2005, HATS Master File. Those five applicants should have been categorized as “N5,” which is a need-based preference that signifies members of the family are not working and the family is living in substandard housing. However, NYCHA provided no documentation to substantiate this assertion.

The lack of integration between HATS and TSAP in each of these cases makes it difficult to be assured that the system was not manipulated to allow ineligible applicants to be placed on the rental waiting list with the opportunity to obtain NYCHA housing.

We also found 3,920 instances in which applicants listed as certified in HATS should have appeared on the TSAP database but did not. This represented ten percent of the applicants who were certified as eligible in HATS as of January 19, 2005. In those instances, the HATS database did not indicate a move-in date for housing for those applicants. Without a move-in date, those applicants should still have been listed on a rental waiting list in TSAP. The lack of congruent information between the two systems raises the possibility that eligible applicants might not have been offered NYCHA housing when it was available for them.

Finally, we found the following discrepancies between the information contained on the HATS and TSAP systems in files for the same applicants:

- There were 889 records whose priority codes did not match. Priority in applicant selection for housing is determined according to the priority codes assigned by NYCHA. An inaccurate priority code may cause an applicant not to be selected at the appropriate time, an issue of fairness.
- There were 79 records whose project certification information did not match. Inaccurate housing location information can cause an applicant to be selected for housing in a borough that is not desired. Those applicants are therefore likely to decline the offered selections. This situation may also prevent the applicants’ selection for apartments at the preferred location when it becomes available.
- There were 193 records whose “number-of-rooms requested or required” by the applicant did not match. Inaccurate number-of-rooms information can cause an applicant to be selected for an apartment of an unsuitable size. Those applicants are likely to decline the selections. This situation may also prevent the applicants’ selection when housing with the requested or required number-of-rooms does become available.

- There were 730 records whose family sizes did not match. Inaccurate family size can cause an applicant to be selected for housing without enough rooms to accommodate the size of the family. Those applicants are likely to decline the selections. This situation may also prevent the applicants' selection when housing of adequate size becomes available.

In addition, there were instances in which an applicant's gross income listed in HATS did not match the same information in TSAP. The gross income amount is one of the criteria used when categorizing an applicant's priority for housing. Therefore, an applicant's eligibility for housing could be adversely affected by this inaccurate information.

As previously stated, we asked NYCHA officials for the cause of the errors and discrepancies in applicant information between the HATS and TSAP systems. NYCHA officials responded that these errors and discrepancies between the HATS Master File and TSAP Referral File primarily resulted from data-entry errors. Although this may be the case, it is the responsibility of NYCHA to ensure the integrity of both systems. By not doing so, the process of providing applicants housing on a fair basis is susceptible to manipulation that could result in ineligible applicants being deemed eligible and placed in NYCHA housing.

Recommendations

NYCHA should:

1. Create an electronic interface that would allow information from HATS to be sent to TSAP and also allow for system reconciliation.

NYCHA Response: "HATS is a mainframe system that was built in the late 1970s. NYCHA recognizes that HATS must be rewritten to meet NYCHA's new needs as well as address integration issues related to TSAP. To effectively address these points, on March 1, 2006, NYCHA released a comprehensive Request for Proposals (RFP). This RFP calls for the replacement of HATS as well as several other legacy applications. The RFP requirements for HATS include the requested integration with TSAP. NYCHA is expecting to award the RFP in the fall of 2006, with the implementation of a new HATS system in the second half of 2007."

2. Review and correct the items mentioned in this report for both systems to ensure that the information in HATS and TSAP are consistent.

NYCHA Response: "NYCHA reviewed the 67 active applications in TSAP which did not appear in HATS. All applications were data entry errors or prematurely purged applications which had been corrected last year by May 2005. All were determined to be eligible.

"NYCHA reviewed the 136 'uncertified applicants with active status in TSAP'. Most were applicants who had rented in Section 8 but were originally found eligible for public housing. All applications in TSAP were corrected last year by April 2005.

“NYCHA reviewed the 5 applicants with an N8 priority in HATS. These applications were found eligible under a preference code used prior to 1997 and grandfathered in TSAP as an N5 priority. NYCHA did not assert to have ‘erroneously’ classified these applications.

“NYCHA reviewed the 3,920 instances in which applicants listed as certified in HATS should have appeared on the TSAP database but did not. The review indicated that 2,192 of these applicants had moved in to public housing and were purged from TSAP and 156 applications were recent certifications and were in the process of being entered in TSAP. Move-in data for these applications had been entered in HATS by March 2006. The balance represents applications which have been purged from TSAP in accordance with our procedures because the applicant (1) twice refused the apartments offered, (2) did not appear for rental, (3) did not respond to our annual canvassing of interest in remaining on the list, or (4) refused to accept the development to which the applicant was certified. NYCHA is currently matching the archived TSAP records to HATS to enter the appropriate statuses in HATS. NYCHA has not found any instances in its review that eligible applicants were not offered housing when reached.

“NYCHA corrected the 79 records in HATS with project certification errors by May 2005. NYCHA reviewed a percentage of the balance of the discrepancies between TSAP and HATS. Since the review indicated that the data in TSAP was correct and did not affect the apartment offer or adversely affect an applicant, the HATS discrepancies will not be corrected because of the tremendous administrative burden.”

Auditor Comment: While we note that these discrepancies have been corrected, these items were uncovered by the auditors and referred to NYCHA for resolution and correction in March 2005. If NYCHA had procedures in place that were capable of reconciling its process, these items would have been identified and corrected earlier. Further, in order to prevent incorrect information from being carried over to a new integrated system, it would be in NYCHA’s best interest to perform data-purification. This initiative would eliminate those items NYCHA felt did not adversely affect an applicant, and any other discrepancies that are likely to occur during the period before the completion of the new system.

Control Weaknesses

Access Controls

Even though NYCHA has formal procedures in place that should identify and eliminate inactive user IDs and user IDs for individuals who leave NYCHA service, those procedures are not always followed. As a result, we found ten active HATS system accounts and 30 active TSAP system accounts of former employees. Comptroller’s Directive #18, §8.1.2, states, “Active password management includes . . . deactivation of inactive user accounts and accounts for employees whose services have terminated.”

We found that DHA reviewed the user profiles of its employees to determine whether employees have the appropriate access to the HATS and TSAP systems. However, NYCHA does not have formal procedures in place that require management to review user profiles and system access for the HATS system. Such a management review is in place for the TSAP system. This formal review would allow management to determine whether employees have the appropriate user profiles and system access required to complete the designated tasks for their job functions. Without such a formal management review of user profiles and system access, NYCHA may not be maintaining the systems' security at an optimal level. NIST's "Generally Accepted Principles and Practices for Securing Information Technology Systems," §3.5.2, states, "Organizations should ensure effective administration of users' computer access to maintain system security, including user account management, auditing and the timely modification or removal of access."

Finally, HATS audit logs do not indicate the user ID of the person making data changes. Without adequate audit trails, NYCHA lacks the ability to provide a record of user actions that: enables management to review or verify user activities; enables after-the-fact investigations of how, when, and why problems occurred; and identify problems, other than intrusions, as they occur. These access control weakness could allow unauthorized data manipulation of applicant records to remain undetected. Comptroller's Directive 18, § 8.5, states:

"A key element in the control over the information processing environment is the incorporation of audit trails into general and application control procedures. Audit trails maintain records of a variety of system events and activities. Every data entry or change, all modifications of system software or application software, and changes in the authorized use of a system's physical resources should result in the recordation of the event so that management or auditors can trace any change back to its source."

Recommendations

NYCHA should:

3. Ensure that it terminates the access privileges of employees who have inactive HATS and TSAP accounts as well as those of all former employees.

NYCHA Response: "At the time of the audit, it was recognized and reported by Comptroller's auditors that NYCHA had policies and procedures in place for removing terminated employees from business systems. Since then these procedures have been enhanced and automated using a workflow tool called Movaris. Movaris is a generic business process engine that enables the automation of business procedures like the removal of terminated employees from disparate systems. The workflow ensures that the proper security administrators are notified and acknowledge that they have removed access from terminated employees. The implementation of the Movaris workflow will ensure that terminated employees are promptly removed from all business applications in addition to HATS and TSAP. The Movaris workflow went into production last year in June 2005."

Auditor Comment: As previously stated, we found that NYCHA had policies and procedures in place for removing terminated employees from the business system, but it did not follow them. Neglecting to delete inactive user accounts increases the system's vulnerability to inappropriate access and abuse.

4. Create a formal procedure for HATS that ensures the approved review of user privileges.

NYCHA Response: "NYCHA implemented a process on October 15, 2000 whereby all requests for access to HATS are submitted to either the Deputy Director or the Director of the Department of Housing Applications for their approval. This ensures that the appropriate access to HATS is granted to the user based on their job function. The standard procedure was shared with the Comptroller's auditor during this audit. NYCHA is currently reviewing all staff with HATS access to determine whether they still require access. NYCHA will be conducting this review quarterly."

Auditor Comment: We are aware that formal procedures exist whereby all requests for access to HATS are approved by the Deputy Director. However, NYCHA does not periodically review whether the authorized users have an appropriate level of access for their given responsibilities. The process of requesting access for HATS is quite different from a formal periodic review of user privileges.

5. Ensure that HATS audit logs identify the user ID of the person making changes to the system.

NYCHA Response: "As detailed in the response to Recommendation 1, NYCHA has issued an RFP to replace the HATS System. The requirements for the new HATS state that the system must have an accessible audit trail of user updates."

Operational Controls

NYCHA lacks formal procedures for making program changes to the TSAP system. Currently, program changes are initiated through e-mails. However, DOI Directive §2.1 states, "All received requests must be recorded in a register or database. This record must be added to during the course of the change to provide a complete account of the actions taken during the life span of the change."

Program-change management involves modifying programs, data, and file structures. All changes or modifications to system software should be completely documented, tested, and approved. NYCHA's general approach to performing and documenting a program change does not provide assurance that proper segregation of duties exists, and that each task was performed appropriately, reviewed, and properly authorized. Therefore, we could not determine whether appropriate and authorized changes were made to TSAP's application software. Comptroller's

Directive #18, §9.3.1, states, “Elements of a change control program include: A formal approval and review process that ensures that changes to application and operating system programs and data are not made unless explicitly authorized by appropriate agency personnel.” Without effective program-change management, NYCHA risks unauthorized or unnecessary program changes to its system software. As a consequence data records can be changed and incorrectly processed, while appearing to be processed correctly.

Recommendation

6. NYCHA should create written procedures to ensure that only appropriate, authorized changes are made to TSAP application and system software.

NYCHA Response: “NYCHA is extremely disappointed that this already corrected finding is still in the audit report. Not only has this finding been dismissed by the Comptroller during the NYCHA Data Center Audit issued June 30, 2005, but NYCHA was told at the exit conference on March 15, 2006 that this finding would be removed from the current report. The fact is that NYCHA had and continues to have written procedures to ensure only authorized changes are made to application software. The Comptroller’s office acknowledged this with the following Auditor comment taken directly from the June 30, 2005 report #7A05-118.

‘Auditor Comment: NYCHA Officials provided the procedures to the Auditors at the exit conference stating that these procedures had been implemented. We reviewed these procedures and found them to be adequate’.”

Auditor Comment: The procedures provided by NYCHA during the prior audit were generic and did not specify the controls needed in TSAP, further these procedures were never formally approved. In addition, at the conclusion of this current audit, NYCHA did not provide documentation when requested to substantiate that any procedures were actually in effect for TSAP. Nevertheless, if procedures have been approved and implemented for TSAP, NYCHA should ensure that this information is distributed to the appropriate personnel.



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April 19, 2006

Mr. John Graham
Deputy Comptroller
Audits, Accountancy & Contracts
The City of New York Office of the Comptroller
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New York, New York 10007

Re: Response to Audit Report 7A04-138

Thank you for the opportunity to comment on your audit report regarding our tenant selection and assignment systems' user access controls. Before we respond to the report's recommendations, we believe it is important to clarify a number of areas related to the New York City Housing Authority's (NYCHA) tenant selection process that a reader of this report should know.

First, although we acknowledge that both the Housing Authority Tenant Selection (HATS) and Tenant Selection and Assignment Plan (TSAP) systems are not integrated, it is important to recognize that TSAP is the system used to determine when an eligible applicant is selected for an apartment vacancy. A discrepancy in HATS will not affect an applicant's placement on the development waiting list. Also from a control perspective, access to TSAP for the purpose of entering new applicant records is limited to a small number of employees in the Department of Housing Applications making it impossible for unauthorized staff to enter ineligible applicants. As stated in your report, the audit found no instances of unauthorized access to the HATS and TSAP systems.

NYCHA asserts that the errors cited in your report represent a very low percentage of the number of records and changes entered in HATS and TSAP. During the period of 2001 through 2004, NYCHA

- entered 303,369 new applications in the HATS system,
- entered 50,602 certified applications in the TSAP and HATS systems and
- entered 14,974 inactive (dead) applications in TSAP after certification.

It should be noted that the Authority is fully committed to continuously monitor data entry to mitigate the potential for any error.

Lastly, as recognized in the exit conference with your staff, your Office's processing of the audit report took a significant length of time to complete. The delay in the audit report issuance resulted in one recommendation (Recommendation 6) no longer being warranted since we had already resolved that condition in June 2005. Also, over the last year, NYCHA has been very active in a massive re-engineering technology initiative that will significantly enhance the efficiency of the current application process.

Responses to your recommendations follow:

Recommendation 1

Create an electronic interface that would allow information from HATS to be sent to TSAP and also allow for system reconciliation.

NYCHA Response

HATS is a mainframe system that was built in the late 1970s. NYCHA recognizes that HATS must be rewritten to meet NYCHA's new needs as well as address integration issues related to TSAP. To effectively address these points, on March 1, 2006, NYCHA released a comprehensive Request for Proposals (RFP). This RFP calls for the replacement of HATS as well as several other legacy applications. The RFP requirements for HATS include the requested integration with TSAP. NYCHA is expecting to award the RFP in the fall of 2006, with the implementation of a new HATS system in the second half of 2007.

Recommendation 2

Review and correct the items mentioned in this report for both systems to ensure that the information in HATS and TSAP are consistent.

NYCHA Response

NYCHA reviewed the 67 active applications in TSAP which did not appear in HATS. All applications were data entry errors or prematurely purged applications which had been corrected last year by May 2005. All were determined to be eligible.

NYCHA reviewed the 136 "uncertified applicants with active status in TSAP". Most were applicants who had rented in Section 8 but were originally found eligible for public housing. All applications in TSAP were corrected last year by April 2005.

NYCHA reviewed the 5 applicants with an N8 priority in HATS. These applications were found eligible under a preference code used prior to 1997 and grandfathered in TSAP as an N5 priority. NYCHA did not assert to have "erroneously" classified these applications.

NYCHA reviewed the 3,920 instances in which applicants listed as certified in HATS should have appeared on the TSAP database but did not. The review indicated that 2,192 of these applicants had moved in to public housing and were purged from TSAP and 156 applications were recent certifications and were in the process of being entered in TSAP. Move-in data for these applications had been entered in HATS by March 2006. The

balance represents applications which have been purged from TSAP in accordance with our procedures because the applicant (1) twice refused the apartments offered, (2) did not appear for rental, (3) did not respond to our annual canvassing of interest in remaining on the list, or (4) refused to accept the development to which the applicant was certified. NYCHA is currently matching the archived TSAP records to HATS to enter the appropriate statuses in HATS. NYCHA has not found any instances in its review that eligible applicants were not offered housing when reached.

NYCHA corrected the 79 records in HATS with project certification errors by May 2005. NYCHA reviewed a percentage of the balance of the discrepancies between TSAP and HATS. Since the review indicated that the data in TSAP was correct and did not affect the apartment offer or adversely affect an applicant, the HATS discrepancies will not be corrected because of the tremendous administrative burden.

Recommendation 3

Ensure that NYCHA terminates the access privileges of employees who have inactive HATS and TSAP accounts as well as those of all former employees.

NYCHA Response

At the time of the audit, it was recognized and reported by Comptroller's auditors that NYCHA had policies and procedures in place for removing terminated employees from business systems. Since then these procedures have been enhanced and automated using a workflow tool called Movaris. Movaris is a generic business process engine that enables the automation of business procedures like the removal of terminated employees from disparate systems. The workflow ensures that the proper security administrators are notified and acknowledge that they have removed access from terminated employees. The implementation of the Movaris workflow will ensure that terminated employees are promptly removed from all business applications in addition to HATS and TSAP. The Movaris workflow went into production last year in June 2005.

Recommendation 4

Create a formal procedure for HATS that ensures the approved review of user privileges.

NYCHA Response

NYCHA implemented a process on October 15, 2000 whereby all requests for access to HATS are submitted to either the Deputy Director or the Director of the Department of Housing Applications for their approval. This ensures that the appropriate access to HATS is granted to the user based on their job function. The standard procedure was shared with the Comptroller's auditor during this audit. NYCHA is currently reviewing all staff with HATS access to determine whether they still require access. NYCHA will be conducting this review quarterly.

Recommendation 5

Ensure that HATS audit logs identify the user ID of the person making changes to the system.

NYCHA Response

As detailed in the response to Recommendation 1, NYCHA has issued an RFP to replace the HATS System. The requirements for the new HATS state that the system must have an accessible audit trail of user updates.

Recommendation 6

NYCHA should create written procedures to ensure that only appropriate, authorized changes are made to TSAP application and system software.

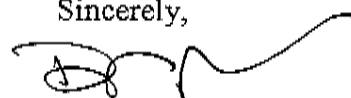
NYCHA Response

NYCHA is extremely disappointed that this already corrected finding is still in the audit report. Not only has this finding been dismissed by the Comptroller during the NYCHA Data Center Audit issued June 30, 2005, but NYCHA was told at the exit conference on March 15, 2006 that this finding would be removed from the current report. The fact is that NYCHA had and continues to have written procedures to ensure only authorized changes are made to application software. The Comptroller's office acknowledged this with the following Auditor comment taken directly from the June 30, 2005 report #7A05-118.

“Auditor Comment: NYCHA Officials provided the procedures to the Auditors at the exit conference stating that these procedures had been implemented. We reviewed these procedures and found them to be adequate”.

Again, thank you for the opportunity to comment on this draft report. Be assured, that NYCHA will continue to take the necessary steps to ensure complete integrity in all facets of its operations including tenant selection. If you have any questions, please contact Tom Bittman, Director, Audit, at 212-306-3433.

Sincerely,



Douglas Apple
General Manager

cc: A. Duvdevani
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