

AUDIT REPORT

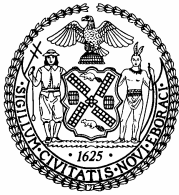


CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BUREAU OF MANAGEMENT AUDIT
WILLIAM C. THOMPSON, JR., COMPTROLLER

Audit Report on the New York City Housing Authority Efforts to Address Tenant Requests for Repairs

MJ08-066A

June 5, 2008



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 Comptroller's responsibilities contained in Chapter 5, § 93, of the New York City Charter, my office has examined the adequacy of the New York City Housing Authority's (NYCHA) efforts to address tenant requests for repairs. The audit covered the period from July 1, 2006 through June 30, 2007.

The New York City Housing Authority (NYCHA) is responsible for providing decent and affordable housing for low to moderate-income City residents. NYCHA is responsible for managing and maintaining 343 public housing developments with 2,644 residential buildings that house more than 400,000 residents. Audits such as this provide a means to ensure that the City's public housing stock is adequately maintained.

The results of our audit, which are presented in this report, have been discussed with NYCHA officials, and their comments were considered in the preparation of 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,

A handwritten signature in cursive script that reads "William C. Thompson, Jr.".

William C. Thompson, Jr.

Report: MJ08-066A
Filed: June 5, 2008

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**City of New York
Office of the Comptroller
Bureau of Management Audit**

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Efforts to Address Tenant Requests for Repairs**

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AUDIT IN BRIEF

This audit addressed the adequacy of the New York City Housing Authority's (NYCHA) efforts to address and resolve tenant requests for repairs. NYCHA is one of the largest public housing authorities in the United States and is responsible for providing decent and affordable housing for low to moderate-income City residents. NYCHA manages and maintains 343 housing developments consisting of 2,644 residential buildings with nearly 179,000 apartment units that house more than 408,000 residents.

In 2005, to standardize the handling of tenant maintenance and repair requests and to reduce backlogs and duplication of repair assignments, NYCHA rolled out the first phase of its Centralized Call Center (CCC). The CCC enabled residents of NYCHA developments in Staten Island and Queens to call a central telephone number 24 hours a day, seven days a week, and speak with a CCC Representative to request and schedule repairs or to report emergencies. The CCC service was expanded to include all Manhattan developments in early 2006, followed by all Brooklyn and Bronx developments by the end of 2007.

This audit was undertaken based on constituent complaints alleging that NYCHA was not responsive to tenant requests for repairs and that the CCC was not working as intended.

Audit Findings and Conclusions

NYCHA maintains adequate efforts to address and resolve tenant repair requests, especially those dealing with emergency conditions and general maintenance. Our inspection of conditions at 95 apartments at the 10 sampled management offices and developments showed that NYCHA personnel completed repairs for 109 (95%) of the 115 work tickets associated with those apartments. Further, the implementation of the CCC that reorganized how tenants' complaints and repair requests are handled appears to have allowed NYCHA to better meet its goals of standardizing the handling of tenant repair requests and more effectively reducing backlogs and duplication of repair assignments.

The audit found that while all emergency, urgent, and routine maintenance tasks were completed promptly, improvements are needed to address delays in completing tasks requiring

skilled-trades personnel. Of the completed routine, sequenced, skilled-trade tasks, only 66 percent of the tasks were completed within 30 days. The remainder took more than 30 days to complete, exceeding NYCHA's 30-day goal for the completion of tasks requiring skilled trades; a little more than one-tenth of these took NYCHA skilled-trade personnel more than 90 days and up to 457 days to complete. Based on these results and similar conditions reported in a previous audit, difficulties remain if the NYCHA borough offices are to manage and assign skilled-trades personnel to respond promptly to repairs requiring their services and to complete them efficiently.

Recommendations

To address these issues, the audit makes six recommendations, including that NYCHA should:

- Review and addresses the level of staffing and scheduling of skilled-trades personnel at the borough offices, identify areas requiring improvements, and design measures to decrease wait time.
- Require that all maintenance, skilled-trade, and supervisory personnel sign the worker's copy of the work ticket.
- Ensure that the management offices retain all original work tickets after the completion of repairs, as required.

NYCHA Response

Of the six recommendations made in this audit NYCHA agreed with four and partially agreed with two, noting that these recommendations would be addressed in early 2009 with the implementation of a new property management and maintenance system.

The full text of the NYCHA response is included as an addendum to this report.

INTRODUCTION

Background

The New York City Housing Authority (NYCHA) is one of the largest public housing authorities in the United States and is responsible for providing decent and affordable housing for low to moderate-income City residents. NYCHA manages and maintains 343 housing developments consisting of 2,644 residential buildings with nearly 179,000 apartment units that house more than 408,000 residents. NYCHA also operates senior centers, community centers, youth programs, and centers for tenants with special needs. It employs more than 13,000 employees.

NYCHA has 147 management offices that are responsible for day-to-day operations (e.g., rental, evictions, repairs) and oversight of repairs at one or more developments. Each management office is generally staffed by a manager, a superintendent, an assistant superintendent, and a staff of maintenance workers and support personnel. The management offices are overseen by the borough offices¹ that in turn report to NYCHA's central office. Generally, routine maintenance work is performed by maintenance workers, under the direction of the management offices. Work that requires a higher degree of specialization (plumbing, electrical, carpentry, etc.) is performed by skilled-trade workers who are organized and supervised by one of the borough offices.

In 2005, to standardize the handling of tenant maintenance and repair requests and to reduce backlogs and duplication of repair assignments, NYCHA rolled out the first phase of its Centralized Call Center (CCC). The CCC enabled residents of NYCHA developments in Staten Island and Queens to call a central telephone number 24 hours a day, seven days a week, and speak with a CCC Representative to request and schedule repairs or to report emergencies. The CCC service was expanded to include all Manhattan developments in early 2006, followed by all Brooklyn and Bronx developments by the end of 2007.

Prior to the implementation of CCC, tenants would report conditions requiring repairs to their management office, which would generate a work ticket and assign a worker to respond to the complaint. However, because appointments were not prescheduled, work tickets were often duplicated because residents were not home when the worker arrived.

Under the CCC, tenants are directed to call a central number to report defective conditions and request repairs. During the call, a CCC representative will interview the tenant to determine the nature and priority of the condition. Calls dealing with emergency and urgent conditions are relayed to the Emergency Service Department (ESD) and must be abated within 24 hours (for emergency conditions) or 48 hours (for urgent conditions). For routine (non-emergency or non-urgent) repair requests, an appointment will be scheduled for a maintenance worker to visit the apartment at a time convenient for the tenant, generally within two weeks. At the time of the initial call, the CCC Representative will also create (open) a new work ticket in NYCHA's Project Information Management System (PIMS)—a computerized work-ticket tracking system that

¹ NYCHA operated five borough offices, one in each borough, until December 1, 2007, when it consolidated the operations of the Queens and Staten Island Borough Offices into one office.

captures all work-ticket information from initiation through disposition. In addition to the CCC, PIMS is accessible by authorized NYCHA personnel at the central, borough, and management offices through the NYCHA AS/400 network.

PIMS generates an individually numbered work ticket for each repair request as well as the subsequent work tickets for the sequenced tasks to repair the condition. The work ticket number as well as the task sequence number (i.e., 1, 2, 3) appear on each ticket and worker's copy for that repair. For the period July 1, 2006, through June 30, 2007, approximately 2.0 million work tickets were generated for tenant repair and maintenance requests at NYCHA developments.

Each day, the Superintendent or Assistant Superintendent at each management office will access PIMS, print out a report and associated hard copies (worker's copies) of the work tickets scheduled for that day, and assign the work tickets to maintenance personnel for handling. On the day of a scheduled visit, if the maintenance worker completes the task, no further action is required and the work ticket is closed in PIMS. If additional parts or services are needed to complete the repair, the work ticket will be left open with a job status of either "return for reassignment" or "waiting for parts." If the repair is determined to require a skilled-trades worker, the work ticket will be sequenced (assigned) to skilled-trades and the tenant notified to call the CCC to make an appointment for the skilled-trades personnel. If a tenant is not home at the time of a scheduled visit, the worker notifies his or her supervisor, who will then attempt to call the tenant while the worker is at the apartment. If the tenant cannot be contacted, the work ticket is closed by the management office indicating "tenant not home" as the reason. The maintenance worker will go to the next appointment.

At the end of the day, NYCHA maintenance (and skilled-trades) workers submit the completed worker's copy of work tickets to the Superintendent or Assistant Superintendent and the status of each work ticket is updated in PIMS. Completed work tickets should be signed and dated by the worker and supervisor attesting to the work completed. All original (worker's copy) work tickets are kept on file at the management offices. Work tickets requiring skilled-trades workers are sequenced and assigned to the borough offices, which oversee the assignment of skilled-trades personnel in accordance with the appointments scheduled with tenants through the CCC.

This audit was undertaken based on constituent complaints alleging that NYCHA was not responsive to tenant requests for repairs and that the CCC was not working as intended.

Objective

The objective of this audit was to determine the adequacy of NYCHA's efforts to address and resolve tenant requests for repairs.

Scope and Methodology

The scope of this audit covered tenant repair requests requiring skilled-trades workers placed with NYCHA during the twelve months July 1, 2006, through June 30, 2007. This audit evaluated NYCHA's effectiveness in addressing tenant requests for specific repairs within their apartments. Particular attention was focused on NYCHA's timeliness in addressing and

completing tasks that required skilled-trades personnel. The audit did not address NYCHA's efforts to respond to complaints related to external or internal common areas, such as lobbies, community centers, and elevators, or plant utility areas, such as boiler or mechanical rooms; nor did we assess the condition in those areas. To accomplish our objective we performed the following procedures.

To obtain an understanding of the organizational departments responsible for the repair and maintenance of NYCHA developments and their general roles and responsibilities, we reviewed Title 24, Chapter IX, of the Code of Federal Regulations that addresses Public Housing,² the NYCHA *Comprehensive Annual Financial Report for the Year Ended December 31, 2006*, along with various reports, publications, and other relevant materials obtained from the NYCHA Web site and other sources.

Evaluation of Controls

To understand and evaluate the internal controls in force over the handling of tenant complaints and repair requests and NYCHA's response, we interviewed officials from NYCHA Operations, Emergency Services, Management & Customer Relationship Systems, and Technical Services departments. We also interviewed officials and support personnel at the NYCHA borough offices and the 10 sampled management offices (discussed below). We also reviewed organizational charts and departmental responsibilities.

In addition, we obtained and reviewed NYCHA policies and procedures, process flow diagrams, and training materials addressing the general procedures and steps involved in: (1) the intake and processing of complaints and repair requests received through the CCC or management offices³; (2) the creation of work tickets and scheduling of visits for maintenance and skilled-trades personnel; (3) general maintenance; and (4) after-hours emergency services. We conducted walk-throughs of these various procedures, ascertained whether they were consistently applied, and whether duties were adequately segregated. These procedures were used as criteria to evaluate the adequacy of NYCHA's responsiveness to tenant repair requests.

Further, we reviewed a previous audit conducted by the Comptroller's Office that addressed NYCHA's effectiveness in addressing tenant repair requests.⁴ We noted findings and conditions in that audit that addressed our audit objective or other matters relevant to this audit.

Evaluation of Data Reliability

To familiarize ourselves with PIMS, we reviewed the application user manual and other related documentation provided by NYCHA. We obtained read-only access to the application, reviewed its basic features, and attended a PIMS orientation training session.

² The chapter is entitled "Office of the Assistant Secretary for Public and Indian Housing, Department of Housing and Urban Development" (Revised April 1, 2003).

³ At the time of our audit, Brooklyn and Bronx development and management offices were not yet connected with CCC; therefore, tenant complaints and repair requests were handled directly through the management offices.

⁴ Office of the New York City Comptroller, *The New York City Housing Authority's Effectiveness in Addressing Tenant Requests for Repairs*, (MJ00-117A), issued June 28, 2000.

Since all work tickets are generated through PIMS, and there is limited source documentation, we used 57 workers' copies of work tickets obtained from the Brooklyn management offices to assess the completeness and accuracy of the data. (These tickets were included in the 470 sampled work tickets discussed below.) Specifically, we compared various attributes (i.e., dates, status, and work notes) manually recorded on the workers' copy of the work tickets source documents to the data recorded in PIMS to ensure that the database reflected the information recorded on the original, worker's copies of work tickets. We selected these tickets since Brooklyn represented the first NYCHA developments we visited and the highest number of management offices we sampled.

In addition, we obtained a copy of data extracted from PIMS that contained data for work tickets and sequenced tasks generated from July 1, 2006, through the close of business on or about August 17, 2007. (We limited our testing to work-ticket data for the audit scope period, July 1, 2006, through June 30, 2007). We generated various queries to evaluate the data and assess its reliability and completeness. To gain assurance that the data copy reflected the same information that appeared in the system itself, we compared selected attributes (i.e., apartment number, stair hall, task trade, and work-ticket dates) for the 470 sampled tickets (discussed below) printed from the system to the corresponding attribute data appearing on the copies of the sampled tickets.

Since PIMS is essential to NYCHA's ability to track and address tenant repair requests across NYCHA developments, we reviewed, on a limited basis, the general controls and security over the PIMS application and its network. Specifically, we interviewed officials from NYCHA's Systems and Computer Services (SCS), Business Solution Technology, Information Technology (IT) Security, and IT Infrastructure departments to address these matters. We also conducted a walk-through of the NYCHA data center that houses the PIMS servers and reviewed reports detailing the results of disaster-recovery plan tests performed in May 2005, March 2006, and May 2007.

Based on the results of the above procedures, we determined that the PIMS data reflected in both the copy and the system itself were reliable for audit test purposes. Further, based on our limited review, it appears that adequate general controls were in force.

Selection of Sampled Work Tickets and Sequenced Tasks

From the population of 147 NYCHA management offices, we judgmentally selected 10 management offices (shown in Exhibit A in the appendix) for audit testing: three in Brooklyn, two in the Bronx, two in Manhattan, two in Queens, and one on Staten Island. We then selected nine of the 16 skilled-trade categories to be used in our tests, including: (1) Bricklayer, (2) Carpenter, (3) Contract Paint, (4) Electrician, (5) Glazier, (6) Heat Plant Technician, (7) Painter, (8) Plasterer, and (9) Plumber. These were selected based on our assessment that repairs performed by these trades could be readily verified through physical inspection.

From the NYCHA-provided PIMS data copy for the period July 1, 2006, through June 30, 2007, we identified a population of 336,798 work tickets requiring at least one of the selected nine skilled trade categories for all NYCHA managed developments. (These work tickets

represented only those that had apartment numbers and were tenant-specific.) From this population, we generated a list of work tickets for each of 10 sample management offices that required at least one of the nine selected skilled trade categories.

Subsequently, we selected a total of 470 work tickets (with unique numbers) for the 10 sampled management offices. We selected between 38 and 63 tickets per management office based on the actual number of work tickets for each skilled trade (shown in Exhibit B in the appendix). (No distinction was made for routine, urgent, or emergency priorities when selecting work tickets.)

Evaluation of Response to Repair Requests

At NYCHA headquarters, we printed all 470 sampled work tickets from the PIMS application. We then visited the 10 sampled management offices with the intent to perform physical inspections of the apartments indicated on the work tickets. We also interviewed NYCHA personnel at those offices and requested the original signed work tickets (i.e., the signed worker's copy) for those in our sample. We obtained 281 (60%) worker's copies of work tickets of the 470 sampled work tickets. These 281 work tickets represented those that were available at the management offices at the time of our visits.

To ascertain the level of work performed relative to these work tickets, between December 10, 2007, and February 4, 2008, we attempted to visit the listed apartments for inspection, accompanied by NYCHA personnel. We were able to gain access to 95 apartments accounting for 115 work tickets (some apartments had more than one work ticket), and inspected the areas of the reported repair to determine whether the work was reasonably completed. During the visits, we also interviewed the tenants to confirm that they had made the original complaint or repair request to and assess their satisfaction with NYCHA's response and the work performed.

To measure NYCHA's effectiveness in addressing tenant repair requests, using the 115 work tickets for the 95 apartments accessed and inspected, we calculated the time elapsed between the work ticket creation (open) dates and the completion (close) dates. To get a clearer perspective of events occurring between the creation and close of work tickets, we determined the number of tasks (sequences) associated with the sampled work ticket numbers, and then calculated the time it took for NYCHA to complete the sequenced tasks from assignment to completion. We also measured the time elapsed from the task assignment date to the repair start date.

Further, to determine NYCHA timeliness in responding to and completing needed repairs we calculated the average time it took each skilled-trade worker to complete assigned tasks and ascertained whether NYCHA was meeting established its time benchmarks. Specifically, we determined whether emergency conditions were abated within 24 hours and urgent calls received responses within 48 hours of the receipt of a complaint. We also determined whether routine skilled-trade tasks were completed within 30 days of assignment date, in accordance with NYCHA's stated goal.

Evaluation of the Centralized Call Center

On a limited basis, we evaluated the operation of the CCC by conducting a walk-through of the center and observed the processes involved in the call intake, data entry, scheduling, and reporting functions of the center. We interviewed CCC representatives and observed them taking calls from tenants, entering information, and creating work tickets in PIMS.

During our visits to the 10 sampled management offices, we questioned NYCHA personnel regarding their experiences with the CCC. At the Staten Island, Queens, and Manhattan developments, which were all connected to the CCC during the audit scope period, we asked NYCHA personnel their opinion about the effectiveness of the CCC in addressing tenant repair requests in comparison to the former procedures for them.

We obtained from NYCHA a file listing work tickets closed with a “Tenant Not Home” (TNH) classification from July 2006 through June 2007. To measure the effectiveness of the CCC, we calculated the number of TNH closed work tickets for each borough and compared those for Staten Island, Queens, and Manhattan developments (connected to the CCC) to the closed TNH work tickets for Brooklyn and Bronx developments, which were not connected to the CCC during the audit scope period.

The results of tests involving the sampled management offices and work tickets were not selected in a manner to enable them to be projected to the respective populations. Nevertheless, the sample test results provided a reasonable basis for us to assess the adequacy of NYCHA’s efforts to respond to tenant repair requests.

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 City Comptroller’s audit responsibilities 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 May 8, 2008. On May 12, 2008, we submitted a draft report to NYCHA officials with a request for comments. We received a written response from NYCHA officials on May 27, 2008. Of the six recommendations made in this audit NYCHA agreed with four and partially agreed with two, noting that these recommendations would be addressed in early 2009 with the implementation of a new property management and maintenance system. NYCHA stated:

“Thank you for your draft audit report commenting on the New York City Housing Authority’s Efforts to Address Tenant Requests for Repairs. We appreciate your insight into ways that NYCHA can improve its operations.

NYCHA is committed to improving our maintenance process . . . To this end, NYCHA is implementing the NYCHA Improving Customer Experience (NICE) system. One feature of this system will be a new work ticket system, which should be fully operational in early 2009.

The full text of the NYCHA response appears as an addendum to this report.

FINDINGS AND RECOMMENDATIONS

NYCHA maintains adequate efforts to address and resolve tenant repair requests, especially those dealing with emergency conditions and general maintenance. Our inspection of conditions at 95 apartments at the 10 sampled management offices and developments showed that NYCHA personnel completed repairs for 109 (95%) of the 115 work tickets associated with those apartments. Further, the implementation of the CCC that reorganized how tenants' complaints and repair requests are handled appears to have allowed NYCHA to better meet its goals of standardizing the handling of tenant repair requests and more effectively reducing backlogs and duplication of repair assignments.

Of the 115 sampled work tickets for the 95 apartments inspected, 8 work tickets were for emergency conditions, and 8 were for urgent conditions. The remaining 99 sampled work tickets had a total of 197 sequenced tasks, including 70 maintenance tasks and 127 skilled-trade tasks (122 that were finished and 5 that were not). While all emergency, urgent, and routine maintenance tasks were completed promptly, improvements are needed to address delays in completing tasks requiring skilled-trades personnel.

Of the completed 122 routine, sequenced, skilled-trade tasks, only 81 (66%) tasks were completed within 30 days; the other 41 (34%) tasks took more than 30 days to complete, exceeding NYCHA's 30-day goal for the completion of tasks requiring skilled trades. Further analysis identified 14 (11%) of the 122 tasks that took NYCHA skilled-trade personnel more than 90 days and up to 457 days to complete. Based on these results and similar conditions reported in a previous audit, difficulties remain if the NYCHA borough offices are to manage and assign skilled-trades personnel to respond promptly to repairs requiring their services and to complete them efficiently.

Other weaknesses noted in this audit include that none of the 10 sampled management offices kept on file all of the worker's copies of the completed work tickets. In addition, NYCHA maintenance, skilled-trades, and supervisory personnel did not consistently sign the worker's copy of work tickets to acknowledge or attest to the completion of assigned work tasks. Further, we noted that the PIMS database does not have adequate entry controls to ensure that work-ticket close dates cannot be backdated.

These matters are discussed in greater detail in the following sections of this report.

CCC Has Reduced Wait Time for Addressing of Repairs

Our review showed that the implementation of the CCC has assisted NYCHA to be more effective in responding to tenant repair requests. This general sentiment was expressed by NYCHA personnel whom we interviewed. They asserted that the number of work tickets closed because a tenant was not home has decreased because of the scheduling of appointments with tenants and that most tenants have honored their scheduled appointments.

The most notable benefit of the CCC has been the scheduling of maintenance personnel at times convenient to the tenants. This has reduced the repetition of work assignments because

of tenants not being home. As reflected in Table I below, for the period July 1, 2006, through June 30, 2007, work tickets closed as “Tenant Not Home” (TNH) for Queens, Manhattan, and Staten Island (boroughs connected to the CCC) averaged 15 percent of all work tickets for those boroughs. For Brooklyn and Bronx, which were not connected to the CCC as of June 30, 2007, an average of 21 percent of all work tickets for the same 12-month period in these boroughs were closed as TNH.

Table I

“Tenant Not Home” Closed Work Tickets
CCC-Connected Boroughs vs. Non-CCC-Connected Boroughs
July 1, 2006, through June 30, 2007

Borough	Total Work Tickets All Developments	Work Tickets Closed as TNH	Percent (%) of Closed TNH Tickets
<i><u>Connected to the CCC as of June 30, 2007</u></i>			
Queens	254,835	40,346	16%
Manhattan	663,714	96,845	15%
Staten Island	82,656	10,421	13%
Average	333,735	49,204	15%
<i><u>Not Yet Connected to the CCC as of June 30, 2007</u></i>			
Brooklyn	770,664	166,578	22%
Bronx	511,916	105,187	21%
Average	641,290	135,883	21%

When we presented this information to NYCHA officials, they stated that a 10 percent rate of closing work tickets because of TNH is considered acceptable to them. However, they noted that the actual level of work tickets closed for TNH both pre- and post-CCC implementation was higher; similar to the levels shown in shown in Table I.

Another telling measurement of the CCC’s impact is NYCHA’s timeliness in addressing and resolving tenant repair requests pre- and post-CCC. For the audit scope period July 1, 2006, through June 30, 2007, NYCHA addressed or completed repairs for work tickets for Queens, Manhattan, and Staten Island developments (all connected to the CCC) within an average of 19 days (for all maintenance and skilled trade tasks) from the task assignment date. Whereas, for the work tickets for Brooklyn and Bronx developments (neither connected to the CCC), NYCHA took an average of 74 days to respond to or complete assigned tasks. Since Brooklyn and Bronx were not under the CCC, appointments were not scheduled with tenants, and the propensity for repetition of work assignments was greater, resulting in the more lengthy time to complete needed repairs.

This analysis provided sufficient support to show that the CCC has assisted NYCHA to create greater efficiency and effectiveness in addressing customer complaints; however, because

of a higher than acceptable rate of TNH closed work tickets and delays in completing skilled-trade tasks (discussed later), there are improvements yet to be made.

NYCHA Completed Repairs at Most of the 95 Apartments Inspected

During our visits to the NYCHA developments, we gained access to 95 apartments associated with 115 (24%) of the 470 sampled work tickets for the 10 sampled management offices. Based on our inspection of the 95 apartments, we found that NYCHA maintenance and sequenced skilled-trades tasks were completed and the defective conditions corrected for 109 (95%) of the 115 skilled-trade work tickets associated with those apartments. The repairs were not completed for 6 (5%) of the 115 work tickets because tenants either refused the recommended repair or were not at home at the time NYCHA personnel visited the apartment.

While we found that the majority of repairs associated with the 115 tickets for the 95 apartments we were able to inspect were completed to the tenant's general satisfaction, repairs or tasks requiring skilled-trades personnel were not completed in a timely manner or within the time goals established by NYCHA. These matters are discussed in below.

Skilled-Trade Tasks Not Completed in a Timely Manner

Our analysis of the NYCHA's ability to respond effectively and promptly to resolve tenant repair requests disclosed that NYCHA personnel addressed conditions involving emergency, urgent, and general routine maintenance conditions in a timely manner. However, there were considerable delays in completing skilled-trade tasks necessary to correct or repair defective conditions because of extended wait time between the date a task was assigned and the date the work was started.

For the 115 sampled work tickets associated with the 95 apartments that we inspected, 8 were for emergency conditions, 8 were for urgent conditions, and the remaining 99 work tickets involved routine (maintenance and skilled-trade) tasks. All of the emergency tickets required a Heating Plant Technician (HPT)—a skilled-trade worker—and were resolved within 24 hours, in accordance with NYCHA's goal for emergency conditions. All of the urgent tickets—five requiring an HPT and three a maintenance worker—were addressed within NYCHA's 48-hour timeframe. The 99 routine priority work tickets had a total of 197 sequenced tasks, including 70 maintenance and paint inspection tasks and 127 sequenced skilled-trade tasks. Of the sequenced skilled-trade tasks, 122 were completed; the remaining five sequenced tasks were not completed because either the tenant was not home or the tenant refused the repair.⁵

As reflected in Table II below, overall, 150 (78%) of the 192 completed tasks were completed within 30 days. However, it took NYCHA personnel more than 30 days to complete the remaining 42 (22%) tasks. Maintenance tasks were completed generally within one day of

⁵ Two of the five incomplete work tasks were because the tenant refused the recommended repair. For example, a carpenter recommended replacement of a track wheel on a sliding closet door, but the tenant wanted a new door and refused the recommended repair.

assignment, and paint inspections were completed within an average of 10 days of assignment. Of the 122 sequenced skilled-trade tasks, 81 (66%) tasks were completed within 30 days. However, the other 41 (34%) tasks took more than 30 days to complete, exceeding NYCHA's 30-day goal for the completion of tasks requiring skilled trades.

Table II

Length of Time To Resolve 99 Work Tickets and Sequenced Tasks

Task	(a) # of Work Ticket Sequenced Tasks	(b) # of Tasks Completed 30 Days or Less From Assignment Date	Percent (<i>b ÷ a</i>)	(c) # of Tasks Completed in More Than 30 Days	Percent (<i>c ÷ a</i>)	Average Days To Complete Task from Assignment Date
<i>Non-Skilled Trade Tasks</i>						
Maintenance	44	44	100%	0	0%	1.4
Paint Inspection*	26	25	96%	1	4%	9.5
Sub Total	70	69	99%	1	1%	
<i>Skilled Trade Tasks</i>						
Bricklayer	8	8	100%	0	0%	3.4
Carpenter	17	12	71%	5	29%	41.6
Contract Paint	13	4	31%	9	69%	85.9
Electrician	11	10	91%	1	9%	13.4
Glazier	5	3	60%	2	40%	55.4
HPT	3	3	100%	0	0%	1.3
Painter	26	11	42%	15	58%	60.3
Plasterer	27	20	74%	7	26%	21.2
Plumber	12	10	83%	2	17%	17.8
Sub Total	122	81	66%	41	34%	
Grand Total	192	150	78%	42	22%	59

Note: *For the purpose of our analysis, we did not consider "Paint Inspection" a skilled-trade task.

While more than one-third of the completed 122 skilled-trade tasks represented in our analysis took more than 30 days to complete, it is important to note that at least 91 percent of the tasks (included in our sample) requiring Bricklayer, HPT, and Electrician skill-trades personnel were completed within 30 days. However, other skilled-trade personnel were less successful in meeting NYCHA's 30-day goal. For example, Plumber, Plasterer, and Carpenter tasks were completed within 30 days only 71 to 83 percent of the time. The remaining (sampled work ticket) tasks requiring Glazier, Painter, and Contract Paint skilled-trade personnel exceeded the 30-day completion goal 40 to 69 percent of the time.

When we evaluated the time (in whole days) it took for skilled trade tasks to be addressed or completed from the assignment date, we identified 14 (11%) of the completed 122 sequenced tasks that took NYCHA personnel more than 90 days and up to 457 days (the latter for one Contract Paint task) to complete (shown in Exhibit C of the appendix). When we evaluated the average time it took for NYCHA skilled-trades personnel to start the work once assigned (wait time), we found that in general the time to complete tasks equaled that wait time. Consequently, the actual work was performed and completed on the same day.

When a specific work ticket is sequenced for a painter (e.g., to paint a repaired wall), a NYCHA painter will be assigned the task. However, when several apartments are scheduled to be painted in accordance with building maintenance schedules (e.g., apartments painted every three years), NYCHA will hire an outside contractor to perform the job of painting several apartments at a given development(s). Fourteen of the 99 routine tasks shown in Table II were “Contract Paint” tasks. For 13 of these, a work ticket was created that was first sequenced for “Paint Inspection” and then for “Contract Paint.” (Some of these work tickets were also sequenced for “Plasterer” prior to being sequenced for “Contract Paint.”)

We learned that work tickets sequenced for “Contract Paint” may be left open until all contracted work in a development is completed and the contractor submits certification of work completed for all apartments. Therefore, the measure for the “Contract Paint” skilled trade may not reflect a true account of the time to complete the task for specific work tickets. Nevertheless, for all other sequenced, skilled-trades tasks, the assignment date generally represents the day that a previous task was completed and the work ticket sequenced (or assigned) for the next required task. Since the borough offices are advised through PIMS of all sequenced work tickets requiring skilled trades, the extended wait time for skilled-trade tasks to be started provides a strong indicator of conditions (not addressed in this audit) that hinder the ability of borough offices to assign work schedules for NYCHA’s skilled-trades personnel in a timely manner.

During a meeting on April 10, 2008, NYCHA officials asserted that the delays experienced in the completion of work tasks requiring skilled trades are related to limited skilled-trade personnel resources and the ability of the borough offices to schedule those resources given the volume of tenant repair requests. They stated that certain trades (e.g., carpenter and painter) are called for more frequently than others to respond to tenant-specific repairs; therefore, depending on the task and the expected time to complete the task, a tenant request may not be addressed for several months. Also, they stated that completion of skilled trade tasks requiring a contractor (e.g., Contract Paint) are dependent on the availability of funds. NYCHA officials stated that some restructuring is planned for the skilled trades to address the delays. For example, paint inspector tasks are to be consolidated with another task.

Similar findings were noted in the Comptroller’s earlier audit. That audit concluded that the level of staffing to address skilled-trades work tickets and the lack of coordination between scheduling of skilled-trades staff and tenant availability were key reasons for a high number of skilled-trade work tickets remaining outstanding for a long period of time. The CCC has addressed NYCHA’s scheduling of appointments with tenants (discussed later); however, the weaknesses dealing with the borough offices’ ability to efficiently manage and effectively assign skilled-trades personnel to respond promptly to open work tickets and complete needed tasks remain unresolved.

Recommendations

NYCHA should:

1. Review and addresses the level of staffing and scheduling of skilled-trades personnel at the borough offices, identify areas requiring improvements, and design measures to decrease wait time.

NYCHA Response: NYCHA partially agreed, stating: “Maintenance and skilled trades, with the exception of paint, work items are scheduled through the Centralized Call Center ‘CCC.’ Appointments are scheduled based on the availability of staff and dates selected by residents. While NYCHA’s goal is to provide excellent customer services, we have limited staffing and other resources available to significantly reduce wait time in all skilled trade categories. With diminishing federal funding, which has resulted in budget deficits, layoffs and a hiring freeze, we have limited ability to hire additional staff to reduce backlogs in carpentry and paint, in particular.”

Completion of Repairs Not Consistently Acknowledged by NYCHA Personnel

Our review of the original worker’s copy of 281 work tickets obtained from the 10 sampled developments disclosed that NYCHA maintenance, skilled-trades, and supervisory personnel do not consistently sign the worker’s copy to acknowledge or attest to the completion of assigned work tasks.

NYCHA requires workers (whether maintenance or skilled trades) to manually record the date and time of task completion and then sign the worker’s copy of the work ticket attesting to completion of the work as reported. Subsequently, the worker is required to return the original work ticket to his or her supervisor (i.e., Superintendent or Assistant Superintendent) who should then sign the ticket as evidence of supervisory oversight.

As shown in Table III, below, of the 281 original worker’s copies of work tickets kept on file at the 10 sampled management offices, 273 (97%) were signed and dated by the workers upon completion of the tasks. While the significant portion of work tickets were signed by the workers, only 83 (30%) of the 281 original work tickets were signed by supervisory personnel. The remaining 198 (70%) original work tickets were unsigned by supervisory personnel; therefore, there was no documentation attesting to the superintendents’ closeout or sequencing of the work tickets.

Table III

Completion of Repairs on 267 of 281 Original Work Tickets
Acknowledged by NYCHA Workers and Supervisory Personnel

Borough	Development	# of Work Tickets Rec'd	Work Tickets Attested to by Workers				Work Tickets Completed by Supervisory Personnel			
		(a)	(b) # Signed	% (b÷a)	(c) # Not Signed	% (c÷a)	(d) # Signed	% (d÷a)	(e) # Not Signed	% (e÷a)
Brooklyn	Marlboro	10	10	100%	0	0%	2	20%	8	80%
	Layfayette	21	21	100%	0	0%	13	62%	8	38%
	William Pl	26	26	100%	0	0%	3	12%	23	88%
Bronx	Castle Hill	42	40	95%	2	5%	1	2%	41	98%
	Murphy	27	27	100%	0	0%	24	89%	3	11%
Queens	Ravenswood	32	32	100%	0	0%	1	3%	31	97%
	Hammel	39	36	92%	3	8%	2	5%	37	95%
Manhattan	Wagner	24	24	100%	0	0%	1	4%	23	96%
	Straus	22	21	95%	1	5%	2	9%	20	91%
Staten Island	Richmond	38	36	95%	2	5%	34	89%	4	11%
Total		281	273	97%	8	3%	83	30%	198	70%

According to NYCHA officials, “the superintendent or his/her designee’s signature on the work ticket indicates that s/he has reviewed the work ticket and deems that the work ticket has been completed and/or sequenced to the next task.”

Except for work tasks involving vacant apartments, at the time of completing an assigned task, the worker should also request the tenant to sign the work ticket to acknowledge work completion. Fourteen (5%) of the 281 original worker’s copies of work tickets obtained from the management offices involved vacant apartments; the remaining 267 (95%) involved occupied apartments. Only 160 (60%) of the 267 original work tickets involving occupied apartments were signed by tenants. The remaining 107 (40%) tickets were unsigned by tenants.

There may be instances when a tenant may refuse to sign a work ticket when requested. In addition, a worker may fail to request a tenant’s signature upon completing an assigned task. However, questions could be raised about the authenticity of reported completed tasks, especially when considering that 70 percent of the 281 original worker’s copies of work tickets obtained from the management offices were unsigned by supervisory personnel and 40 percent of the tickets were unsigned by the tenants. Without the consistent sign-off of work tickets by supervisory personnel and tenants, there is a greater risk that work tickets may be inappropriately closed, or may not be subsequently sequenced and assigned for the next required task, if necessary.

Recommendation

NYCHA should:

2. Require that all maintenance, skilled-trade, and supervisory personnel sign the worker's copy of the work ticket.

NYCHA Response: NYCHA agreed, stating: "It is currently a requirement that applicable workers and supervisory staff sign work tickets prior to changing the work ticket status to 'closed'. A directive—ADGM20080015 (Appendix 1)—has been issued from the Assistant Deputy General Manager of Operations for Management to applicable borough management and development personnel reminding them that it is a requirement that Superintendents or their designee review and sign all work tickets before they are entered into the work ticket system as closed and before skilled trade work tickets are forwarded to the borough management department office for close-out in the work ticket system. Deputy Directors will be held accountable for the enforcement of this procedure."

Worker's Copy of Work Tickets Not Consistently Kept on File by Management Offices

During our visits to the 10 sampled management offices, we requested the original, worker's copy of the 470 sampled work tickets. However, none of the management offices had all requested work tickets on file.

NYCHA Records Retention Policy⁶ requires that developments retain all original work tickets for the "current year plus one additional year"; thereafter, the tickets can be boxed and shipped to an off-site storage facility. The original work tickets must be retained for seven years before they can be discarded or destroyed.

As shown in Table IV below, the management offices provided us with only 281 (60%) of the 470 requested tickets. The remaining 189 (40%) work tickets were missing.

⁶ NYCHA General Management Directive 3699 (GM-3699), issued April 28/2003.

Table IV

Summary of Original Work Tickets Maintained by NYCHA Management Offices

Borough	Development	(a) Original Work Tickets Requested	(b) Original Work Tickets on File	Percent (%) of Requested Original Tickets Provided (<i>b</i>÷<i>a</i>)	(c) Original Work Tickets Missing	Percent (%) of Requested Original Tickets Missing (<i>c</i>÷<i>a</i>)
Brooklyn	Marlboro	44	10	23%	34	77%
	Lafayette Gardens	38	21	55%	17	45%
	William Plaza	41	26	63%	15	37%
Bronx	Castle Hill	63	42	67%	21	33%
	Murphy	53	27	51%	26	49%
Queens	Ravenswood	55	32	58%	23	42%
	Hammel	45	39	87%	6	13%
Manhattan	Wagner	45	24	53%	21	47%
	Straus	41	22	54%	19	46%
Staten Island	Richmond	45	38	84%	7	16%
Grand Total		470	281	60%	189	40%

If a work ticket requires only a general maintenance worker, once the repair is completed the worker returns the manually annotated, signed and dated ticket to the management office. If a work ticket is sequenced for one or more skilled trade tasks, upon completing each of the assigned task, the respective worker is required to return the worker’s copy of the ticket to the management office, where it is then imaged and e-mailed to the borough office. The original ticket is supposed to be kept at the management office.

By not ensuring that all of the worker’s copies of work tickets are returned by NYCHA personnel upon completing assigned tasks and kept on file at the management offices, there is insufficient documentation properly recorded in PIMS to support the completion of tasks. Further, since NYCHA workers must sign work tickets upon completing an assigned task, and their supervisors must sign the tickets to indicate the completion and/or sequencing of the ticket to the next task, unless all original work tickets are maintained, there is insufficient evidence to support the closing of work tickets and/or the sequencing of tasks.

Recommendation

NYCHA should:

3. Ensure that the management offices retain all original work tickets after the completion of repairs, as required.

NYCHA Response: NYCHA agreed, stating: “As a result of this recommendation, as reflected in the directive–ADGM20080015 (Appendix 1)-issued by the Assistant Deputy General Manager for Management’s office on May 19, 2008, Deputy Directors or

designees will review the retention schedule for work tickets with all applicable staff. Deputy Directions will be required to take a random sample of closed work tickets per maintenance office to determine if the original closed tickets are present in the applicable folders and to determine if the tickets were properly signed by tenants and staff.”

Work Ticket Close Dates Can Be Backdated in PIMS

While we did not fully evaluate PIMS during our audit, certain weaknesses came to our attention that NYCHA should address to increase the reliability and accuracy of the application data. This is especially important since PIMS is fundamental to recording and tracking the status of work tickets and reporting of results. Specifically, our review disclosed that PIMS does not have adequate entry controls to ensure that work-ticket close dates are limited only to the date they are actually closed. Therefore, edit checks for certain data input fields are either not functioning properly or do not exist in PIMS.

Comptroller’s Directive #18, §8.2, requires that “agencies must insure that adequate application controls are in place to eliminate input, processing, and output risks.” Application software controls are defined as “automated controls built into application programs [that] ensure that every transaction entering the information processing environment is authorized, recorded, and processed completely and accurately, protected from physical loss, theft, or unauthorized manipulation, and that the data file integrity is preserved.”

Once a work ticket is closed in PIMS, it cannot be edited. However, there are insufficient edit checks to prevent back-dating open tickets. An open work ticket can be closed out using a date earlier than the date the ticket was actually closed out (input date). For example, on January 15, 2007, NYCHA personnel could access PIMS and close out a work ticket entering an earlier date (i.e., December 20, 2006).

As part of our testing of the reliability of the PIMS data copy provided by NYCHA, we identified 43,416 work tickets classified as “open.” Using a random sample of 30 of these open work tickets (3 for each of the 10 sampled management office), on March 31, 2008, we checked the status of these work tickets in the PIMS database itself to determine whether the 30 sampled tickets were closed, and, if so, the dates they were closed.

We found that 24 (80%) of the 30 work tickets had been closed, and six (20%) others remained opened as of March 31, 2008. However, the actual PIMS database showed that three of the closed work tickets were closed-out *prior* to August 17, 2007, the date that NYCHA had extracted the PIMS data copy provided to the audit team. Evidently, these three work tickets—#214301 for Castle Hill (closed April 12, 2007), #214086 for Castle Hill (closed July 19, 2007), and #071612 for Williams Plaza (closed August 10, 2007)—were closed in PIMS *after* August 17, 2007, but backdated to an earlier date. The remaining 21 closed tickets had close dates after August 17, 2007.

When we presented these findings to NYCHA officials, they stated that work tickets should be closed out in PIMS within seven days of completion of the task; however, the ticket

“closed” date field was intentionally left unrestricted. Consequently, a person could enter an incorrect date that would be accepted in the database.

While the finding concerning the unrestricted date field did not detract from our overall opinion about the adequacy of NYCHA’s efforts to address and resolve tenant repair requests, this limited test disclosed a potential material weakness that could pose problems regarding the accuracy of PIMS data and enable intended or unintended skewing of work-ticket data (e.g., to exaggerate positive performance outcomes). To ensure the reliability and authenticity of PIMS data, NYCHA needs to ensure that proper controls are implemented to prevent the entry of inaccurate and inappropriate data.

Recommendations

NYCHA should:

4. Provide an edit check for the validity of work ticket close dates.

NYCHA Response: NYCHA agreed, stating: “Following the May 8, 2008, exit conference with staff from the Comptroller’s Office, on May 13 [2008], the Information Technology Department created an exception report to be utilized by supervisors. This report will be used to detect incorrect dates, such as an incorrect year in the future or in the past, which the current system allows. Supervisors must review the report to ensure any inconsistencies are verified and corrected.”

5. Design and implement the reporting of exceptions of work-ticket data (e.g., close dates) to provide for the detection and subsequent correction of inaccurate and inappropriate data.

NYCHA Response: NYCHA agreed, stating: “As mentioned in a previous response until the Maximo work ticket system is rolled out an exception report was created to assist in the detection and correction of inaccurate data.”

6. Require separate authorization for the input of adjustments to work-ticket dates. Any changes should be made only by authorized personnel and be appropriately documented to reflect the details and justification of any adjustments.

NYCHA Response: NYCHA partially agreed, stating: “While we strive to have all tickets entered into the system within seven days, due to the volume of tickets closed each day, not all tickets are disposition[ed] on time. It would be an administrative burden to require supervisory staff to approve overrides to permit a prior date entry. . . . [However,] the Maximo work ticket system will allow authorized users the ability to perform an ‘Edit History’ action on a work order after it is closed. The authorization to perform this action is limited based on the user’s security profile. All records that are edited after they are closed will be identifiable by the status which will be HISTEDIT in the status log.”

Exhibit A

Developments Selected for Audit Testing
And the Population (and Sample) of Related Work Tickets for Nine Stilled Trades
July 1, 2006, through June 30, 2007

Borough	Management Offices	Total Work Tickets	# of work tickets selected
Brooklyn	Marlboro	2,134	44
	Williams Plaza	434	41
	Lafayette Gardens	1,074	38
Manhattan	Wagner	5,243	45
	Straus	718	41
The Bronx	Castle Hill	3,471	63
	Murphy	736	53
Queens	Ravenswood	3,570	55
	Hammel	2,359	45
Staten Island	Richmond Terrace	2,466	45
Total		22,205	470

Exhibit B

Stratification of Work Tickets and Sequenced Tasks Requiring Skilled-Trades Personnel, by Borough

Skilled Trade	Manhattan	Bronx	Brooklyn	Queens	Staten Island	Totals	Number of Sampled Work tickets	Number of Apartment on Work Tickets Observed
Bricklayer	4,833	3,818	3,958	2,007	811	15,427	50	8
Carpenter	19,040	11,877	17,174	6,575	1,908	56,574	61	16
Contract Paint	12,662	8,866	10,747	2,648	612	35,535	49	13
Electrician	4,744	3,945	4,169	1,985	1,362	16,205	55	11
Glazier	2,159	1,977	3,512	870	598	9,116	39	8
H.P.T.	30,347	17,344	28,998	12,140	2,443	91,272	55	16
Painter	13,266	8,922	14,775	7,096	3,516	47,575	58	22
Plasterer	13,774	9,585	14,734	5,570	2,137	45,800	51	10
Plumber	4,417	5,562	5,526	2,691	1,098	19,294	52	11
Totals	105,242	71,896	103,593	41,582	14,485	336,798	470	115

Exhibit C

14 Sequenced Skilled-Trade Tasks
 (From the Sample of 115 Work Tickets of 95 Inspected Apartments)
 Completed in More Than 90 Days and Up to 457 Days After Assignment Date

Skilled-Trade Task	# Tickets Over 90 days to Complete	Mgt Office-Development	Work Ticket #	Days to Complete
Carpenter	2	Murphy Murphy	#088927 #088889	196 days 211 days
Cont. Paint	4	Layfayette Gardens Hammel Layfayette Gardens Murphy	#109895 #142999 #111426 #085969	107 days 113 days 141 days 457 days
Electrician	1	Layfayette Gardens	#111040	94 days
Glazier	2	Murphy Murphy	#086246 #085818	109 days 144 days
Painter	4	Castle Hill Murphy Murphy Murphy	#225900 #088591 #088525 #085928	141 days 198 days 227 days 326 days
Plumber	1	Castle Hill	#228015	95 days

**NEW YORK CITY HOUSING AUTHORITY**

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TEL: 212-306-3000 • <http://nyc.gov/nycha>**TINO HERNANDEZ**
CHAIRMAN**EARL ANDREWS, JR.**
VICE-CHAIRMAN**MARGARITA LÓPEZ**
MEMBER**VILMA HUERTAS**
SECRETARY**DOUGLAS APPLE**
GENERAL MANAGER

May 27, 2008

Mr. John Graham
Deputy Comptroller
Policy, Audits, Accountancy & Contracts
The City of New York
Office of the Comptroller
1 Centre Street
New York, NY 10007-2341

RE: Audit report on the New York City Housing Authority
Efforts to Address Tenant Requests for Repairs
Audit Number MJ08-066A

Dear Mr. Graham:

Thank you for your draft audit report commenting on the New York City Housing Authority's Efforts to Address Tenant Requests for Repairs. We appreciate your insight into ways that NYCHA can improve its operations. We have reviewed the report recommendations and our comments on the audit are listed below. We are pleased that the audit determined that 95% of repairs were completed as indicated on the work ticket and that the Comptroller's Office found that the central call center has allowed "NYCHA to better meet its goal of standardizing the handling of tenant repair requests and more effectively reducing backlogs."

NYCHA is committed to improve the quality of services to residents and ensure the long term preservation of public housing through timely and comprehensive maintenance. As part of its effort to improve service to residents, NYCHA continues to seek to identify ways to improve the customer's experience through better technology and work practices. To this end NYCHA is implementing the NYCHA Improving Customer Experience (NICE) system. One feature of this system will be a new work ticket system which should be fully operational in early 2009.

The system NYCHA chose, Maximo, is a market leader asset management tool commonly used by the military, hospitals and other large enterprises to provide comprehensive asset lifecycle and maintenance management. For NYCHA, this means that Maximo will replace several Work Ticket and Emergency Services Computer Systems, and consolidate data so it is easier to use. Staff will be able to look at a computer screen at a glance to see in real-time all overdue, emergency and maintenance work orders that need a Maintenance Operations supervisor's immediate attention.

With over two million maintenance work tickets generated each year, it is vital that NYCHA has more accurate and complete information about where the maintenance work is taking place; and what repairs are being made in apartments or to equipment such as elevators, boilers and appliances. Maximo will also help NYCHA manage maintenance costs by development to comply with new HUD regulations concerning project-based budgeting.

Maximo will provide NYCHA with greater insight into the overall repairs requested and increase its ability to plan for work in the future. The Authority also will be able to better plan inventory purchases to meet maintenance demand more precisely, while ensuring that the right parts are available at the right location when needed.

These changes, together with the full implementation of NICE, will lead to quicker, more reliable and consistent responses to customers' needs and an improved customer experience. This new system will also address a number of recommendations listed in your audit report.

With regard to the specific recommendations of the report, listed below are our responses:

Recommendation #1

NYCHA should review and address the level of staffing and scheduling of skilled-trades personnel at the borough offices, identify areas requiring improvements, and design measures to decrease wait time.

NYCHA Response

Maintenance and skilled trades, with the exception of paint, work items are scheduled through the Centralized Call Center "CCC". Appointments are scheduled based on the availability of staff and dates selected by residents. While NYCHA's goal is to provide excellent customer service, we have limited staffing and other resources available to significantly reduce wait time in all skilled trade categories. With diminishing federal funding, which has resulted in budget deficits, layoffs and a hiring freeze, we have limited ability to hire additional staff to reduce backlogs in carpentry and paint, in particular.

Recommendation #2

NYCHA should require that all maintenance, skilled-trade, and supervisory personnel sign the worker's copy of the work ticket.

NYCHA Response

It is currently a requirement that applicable workers and supervisory staff sign work tickets prior to changing the work ticket status to "closed". A directive - ADGM20080015 (Appendix 1) - has been issued from the Assistant Deputy General Manager of Operations for Management to applicable borough management and development personnel reminding them that it is a requirement that Superintendents or their designee review and sign all work tickets before they are entered into the work ticket system as closed and before skilled trade work tickets are forwarded to the borough management department office for close-out in the work ticket system. Deputy Directors will be held accountable for the enforcement of this procedure.

Recommendation #3

NYCHA should ensure that management offices retain all original work tickets after the completion of repairs, as required.

NYCHA Response

As a result of this recommendation, and as reflected in the directive - ADGM20080015 (Appendix 1) - issued by the Assistant Deputy General Manager of Operations for Management's office on May 19, 2008, Deputy Directors or designees will review the retention schedule for work tickets with all applicable staff. Deputy Directors will be required to take a random sample of closed work tickets per maintenance office to determine if the original closed tickets are present in the applicable folders and to determine if the tickets were properly signed by tenants and staff.

Recommendation #4

Provide an edit check for the validity of work ticket close dates.

NYCHA Response

Currently, the system will not allow staff to enter a close date that is prior to the creation/open date and time of a work ticket or the scheduled date of an appointment. Additionally, the system will not allow close dates beyond the current system date. Following the May 8, 2008 exit conference with staff from the Comptroller's office, on May 13, the Information Technology Department created an exception report to be utilized by supervisors. This report will be used to detect incorrect dates, such as an incorrect year in the future or in the past which the current system allows. Supervisors must review the report to ensure any inconsistencies are verified and corrected.

Under the **NICE** Initiative, the Maximo work ticket system will give staff the ability to enter dates and times in the work ticket system prior to the creation date to accommodate the fact that when emergencies occur and staff must go into an apartment without the creation of a work ticket, a work ticket can be created afterwards reflecting the actual date of the work completed as it is a NYCHA requirement that the actual date of work is recorded. However, when a work order is created after the start of the work, the "created date" on the work order record (generated by the system when the work order is created in Maximo) will be compared to the date that the end user entered for the actual on the work order. If the date of the work order "created Date" is greater than the actual completion date then the user would be forced to enter a reason code.

Recommendation #5

Design and implement the reporting of exceptions of work-ticket data (e.g., close dates) to provide for the detection and subsequent correction of inaccurate and inappropriate data.

NYCHA Response

As mentioned in a previous response until the Maximo work ticket system is rolled out an exception report was created to assist in the detection and correction of inaccurate data. As we prepare for the implementation of the **NICE** system, we are limiting program changes to existing applications.

Recommendation #6

Require separate authorization for the input of adjustments to work-ticket dates. Any changes should be made only by authorized personnel and be appropriately documented to reflect the details and justification of any adjustments.

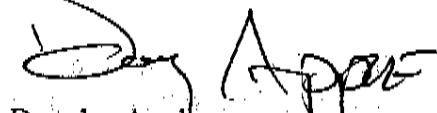
NYCHA Response

Currently, staff is required to record the actual date that work was completed. Accordingly, the current work ticket system is flexible to permit users to enter dates that have occurred prior to the date of entering the disposition information. While we strive to have all tickets entered into the system within seven days, due to the volume of tickets closed each day, not all tickets are disposition on time. It would be an administrative burden to require supervisory staff to approve overrides to permit a prior date entry.

Under the NICE initiative, controls are being designed to protect the validity and reliability of the data. The Maximo work ticket system will allow authorized users the ability to perform an "Edit History" action on a work order after it is closed. The authorization to perform this action is limited based on the user's security profile. All records that are edited after they are closed will be identifiable by the status which will be HISTEDIT in the status log.

We will continue to review the design of applications scheduled for implementation under the NICE initiative to ensure that data control and validity issues are considered and incorporated into the workflow process to ensure reliability of the data captured in the system. Again, NYCHA is committed to improving our maintenance process and appreciates the Comptroller's Office findings to assist us in improving our efforts in this critical area.

Very truly yours,



Douglas Apple
General Manager

c: Chairman
E. Andrews
M. Lopez
R. Podmore
G. Finkelman
S. Gosine

Appendix 1

NEW YORK CITY HOUSING AUTHORITY**EXECUTIVE DEPARTMENT****MEMORANDUM****ADGM20080015****Date:** May 19, 2008**To:** Directors of Management, Deputy Directors, Borough Administrators, Housing Managers, Resident Building Superintendents, and Assistant Managers**From:** Gloria Finkelman, Assistant Deputy General Manager of Operations for Management**Subject:** **Work Ticket Processing and Records Retention Reminders**

Work Ticket Signatures

All completed Maintenance and Skilled Trades work tickets must be signed and dated by the worker and Superintendent or designee. Apartment Inspection work tickets must be signed by the maintenance worker and reviewed and signed by both the Manager and Superintendent. Tenant signatures must be obtained and affixed to every work ticket where work has been performed in a tenant's apartment. Deputy Directors must spot check completed work ticket files on a regular basis to ensure compliance.

Dispositioning of Work Tickets

Staff dispositioning work tickets must ensure that the required signatures are on all work tickets. In addition, the time work is started and completed must be written on the work ticket. Work tickets that require sequencing must have an entry in the notepad indicating dimensions, quantities or any pertinent information to assist the trade in completing the work. Any ticket missing the required information must be returned to the Superintendent, Manager or Borough supervisor for follow-up.

All completed maintenance work tickets must be dispositioned within 24 hours; completed skilled trades tickets must be scanned to the borough for dispositioning.

Supervisory Follow-Up

Managers and Superintendents and borough staff must check actual work tickets with dispositioned tickets in the PIMS Work Tickets System to ensure that completion date on the original work ticket is the same as the completion date in the computerized work ticket program.

Appendix 1

An exception report in the AS400 has been created that lists any work ticket that has any of the following criteria:

- The ticket has been entered (updated) in the AS400 8 or more days after it was completed.
- The completion date is prior to the creation date.

Development supervisors must randomly visit apartments to verify completed work.

Work Ticket Retention Schedule

As per GM 3699 Appendix A, Retention Schedule, original work tickets (current plus one year) with no claims pending should be kept in the Superintendent files. The total retention period for original work tickets is seven years. Deputy Directors are responsible for randomly reviewing completed work ticket files at each maintenance office for adherence to this requirement.

AUDIT IMPLEMENTATION PLAN

AGENCY: NEW YORK CITY HOUSING AUTHORITY

Audit Title and Number: New York City Housing Authority Efforts to Address Tenant Requests for Repairs, MJ03-066A

Audit Report Date: May 12, 2008

Audit Finding	Audit Recommendation and Agency Response	Corrective Action Plan
<p>Skilled-Trade Tasks Not Completed in a Timely Manner</p>	<p>1. Recommendation: NYCHA should review and address the level of staffing and scheduling of skilled-trades personnel at the borough offices, identify areas requiring improvements, and design measures to decrease wait time.</p> <p>Agency Response: Partially Agree</p>	<p>1. Corrective Action: Maintenance and skilled trades work items are scheduled through the Centralized Call Center "CCC". Appointments are scheduled based on the availability of staff and dates selected by residents. While NYCHA's goal is to provide excellent customer service, we have limited staffing and other resources available to significantly reduce wait time in all skilled trade categories. With diminishing federal funding, which has resulted in budget deficits, layoffs and a hiring freeze, we are limited in the number of skilled trades we can hire.</p> <p>However, it is anticipated that NYCHA's investment in the NICE system utilizing the new Maximo work ticket system will yield more efficient and systematic methods of prioritizing and matching resources to demand improving the timeliness of repairs and better enabling supervisory and management staff to monitor work activities and identify and address bottlenecks and gaps in service delivery. Maximo will enable supervisors to more effectively plan and schedule work through additional reports, planning modules and inventory levels in storerooms.</p> <p>Date Implemented: Early 2009.</p>
<p>Completion of Repairs Not Consistently Acknowledged by NYCHA Personnel</p>	<p>2. Recommendation: NYCHA should require that all maintenance, skilled-trade, and supervisory personnel sign the worker's copy of the work ticket.</p> <p>Agency Response: Agree.</p>	<p>2. Corrective Action: It is currently a requirement that applicable workers and supervisory staff sign work tickets prior to changing the work ticket status to "closed". A directive (ADGM20080015) has been issued from the Assistant Deputy General Manager of Operations for Management to applicable borough management and development personnel reminding them that it is a requirement that Superintendents or their designee review and sign</p>

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<p>Worker's Copy of Work Tickets Not Consistently Kept on File by Management Offices</p>	<p>3. Recommendation: NYCHA should ensure that management offices retain all original work tickets after the completion of repairs, as required. Agency Response: Agree</p>	<p>all work tickets before they are entered into the work ticket system as closed and before skilled trade work tickets are forwarded to the borough management department office for close-out in the work ticket system. Deputy Directors will be held accountable for the enforcement of this procedure. Date Implemented: May 19, 2008</p>
<p>Work Ticket Close Dates Can Be Backdated in PIMS</p>	<p>4. Recommendation: Provide an edit check for the validity of work ticket close dates. Agency Response: Agree</p>	<p>3. Corrective Action: As a result of this recommendation, and as reflected in the directive (ADGM20080015) issued by the Assistant Deputy General Manager of Operations for Management's office, Deputy Directors or designees will review the retention schedule for work tickets with all applicable staff. Deputy Directors will be required to take a random sample of closed work tickets per maintenance office to determine if the original closed tickets are present in the applicable folders and to determine if the tickets were properly signed by tenants and staff. Date Implemented: May 19, 2008</p>
		<p>4. Corrective Action: The Information Technology Department created an exception report to be utilized by supervisors which will be used to detect incorrect dates, such as an incorrect year in the future or in the past which the current system allows. Supervisors must review the report to ensure any inconsistencies are verified and corrected. This will be improved when the Maximo Work Ticket System is implemented in early 2009. Date Implemented: May 13, 2008.</p>

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	<p>5. Recommendation: Design and implement the reporting of exceptions of work-ticket data (e.g., close dates) to provide for the detection and subsequent correction of inaccurate and inappropriate data.</p> <p>Agency Response: Agree</p>	<p>5. Corrective Action: As mentioned in a previous response until the Maximo work ticket system is rolled out an exception report was created to assist in the detection and correction of inaccurate data. As we prepare for the implementation of the NICE system, we are limiting program changes to existing applications.</p> <p>Date Implemented: May 13, 2008.</p>
	<p>6. Recommendation: Require separate authorization for the input of adjustments to work-ticket dates. Any changes should be made only by authorized personnel and be appropriately documented to reflect the details and justification of any adjustments.</p> <p>Agency Response: Partially agree</p>	<p>6. Corrective Action: Currently, staff is required to record the actual date that work was completed. Accordingly, the current work ticket system is flexible to permit users to enter dates that have occurred prior to the date of entering the disposition information. While we strive to have all tickets entered into the system within seven days, due to the volume of tickets closed each day, not all tickets are disposition on time. It would be an administrative burden to require supervisory staff to approve overrides to permit a prior date entry.</p> <p>Under the NICE initiative, controls are being designed to protect the validity and reliability of the data. The Maximo work ticket system will allow authorized users the ability to perform an "Edit History" action on a work order after it is closed. The authorization to perform this action is limited based on the user's security profile. All records that are edited after they are closed will be identifiable by the status which will be HISTEDIT in the status log.</p> <p>We will continue to review the design of applications scheduled for implementation under the NICE initiative to ensure that data control and validity issues are considered and incorporated into the workflow process to ensure reliability of the data captured in the system.</p> <p>Date Implemented: Early 2009.</p>