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**PERMIT APPLICATION REVIEW PROCESS
PERFORMANCE AUDIT**

SEPTEMBER 2013



CITY OF DURHAM
AUDIT SERVICES DEPARTMENT

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To: Audit Services Oversight Committee
From: Germaine Brewington, Director
Audit Services Department
Date: September 2013
Re: Permit Application Review Process
Performance Audit

The Department of Audit Services completed the report on the Permit Application Review Process Performance Audit dated September 2013. The purpose of the audit was to examine the adequacy of controls over the permit application process; specifically, cash receipts received from the permit fees and approving and reviewing of permit applications.

This report presents the observations, results, and recommendations of the Permit Application Review Process Performance Audit dated September 2013. City management concurs with the recommendations made. Management's response to the recommendations is included with the attached report.

The Department of Audit Services appreciates the contribution of time and other resources from employees of the City-County Inspections Department in the completion of this audit.

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BACKGROUND INFORMATION

The City-County Inspections Department administers and enforces the North Carolina State Building Code and the zoning ordinances for both the City and County of Durham. The Department ensures the health, safety and welfare of the public and strives to support the City's Strategic Plan goals of a safe and secure community, thriving, livable neighborhoods, and a well-managed City.

The City-County Inspections Department's responsibilities include:

- Reviewing applications for building, electrical, mechanical, plumbing, fire and sign permits;
- Reviewing plans;
- Issuing permits for construction activity;
- Conducting inspections of building projects in progress;
- Issuing Certificates of Compliance; and
- Providing information on requirements for manufactured homes, family care homes, day care facilities, floodplain management and impact fees.

The focus of this audit was on the permit application review process. The Inspections Department staff use the Land Development Office (LDO) system. The LDO system allows contractors to: schedule inspections; review results of inspections; check on the status of permits; check on the review status for plans of building permits and Certificates of Compliance; and apply for mechanical, plumbing, and electrical permits on-line.

The Electrical, Plumbing, Mechanical Permit Application Review Process

1. A customer applies for a permit either online or using a printed application;
2. The application is scanned into the LDO system by the Permit Technician;
3. The Chief Inspectors monitor the LDO system for new permit applications;



BACKGROUND INFORMATION

4. The Chief Inspectors review and approve each permit application based on whether it complies with the applicable code;
5. The Chief Inspectors notify the applicant if the application is disapproved;
6. The Chief Inspectors change the status of the application to “issue” if they approve the permit application; and
7. A permit is issued to the applicant and the appropriate fees are collected.

Building Permit Application Review Process

1. Building permit applications are received and logged by the Permit Technicians. If all the supporting documentation is not present, the Permit Technicians will inform the applicant and the applicant will have to reapply;
2. The Permit Technicians log the application into the LDO system and file the applications along with the plans;
3. The Plan Reviewers review the applications. If the applications are complete they review and approve the application during the initial review;
4. If an application is incomplete, the applicant is notified via email that the application has been denied and the reasons for the denial;
5. When the applicant provides the required information, a re-review occurs. The initial Plan Reviewer as well as another Plan Reviewer review the application for completeness and compliance with applicable codes; and



BACKGROUND INFORMATION

6. After the application is approved, the Permit Technicians change the status of the permit to issued and notifies the applicant that the permit is available for pick-up. The appropriate fees are collected.

The permit fees revenue for fiscal year 2013 amounted to approximately \$4,450,000 and approximately \$4,050,000 for fiscal year 2012. The fees for permits are assessed based on the permit type. The applicant can either pay at the Inspections Department front desk or at Central Cashiering. The Inspections Department does not accept cash payments at their front desk. The Central Cashiering group of the Finance Department processes cash payments. Permits are not issued until payment is received, unless the applicant has an account established with the City of Durham.



EXECUTIVE SUMMARY

Purpose

The purpose of the audit was to examine the adequacy of controls over the permit application process; specifically, cash receipts received from the permit fees and approving and reviewing of permit applications.

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

Results in Brief

Overall, adequate controls existed over the permit application process; specifically, cash receipts received from the permit fees and approving and reviewing of permit applications. However, the Department staff could strengthen controls by performing the following:

Develop standard written operating procedures;

Determine if the customer service performance measure “Notification of Disapproved Building Permit Application within One Business Day of Decision” can be measured; and

Use the LDO system generated reports to collect data for performance measures.

OBJECTIVES, SCOPE AND METHODOLOGY

Objectives

The objectives of the audit were to determine if:

- Adequate controls existed over cash receipts received from the permit application process;
- Adequate processes existed to monitor timely review of permit applications; and
- Adequate controls existed over the permit approval process.

Scope

The scope of the audit included all current practices at the City-County Department of Inspections concerning the permit application review process.

Methodology

Audit staff performed the following procedures to accomplish the objectives of the audit:

1. Documented the cash receipts and billing process for permit applications;
2. Examined the cash receipts and billing process and identified any control deficiencies;
3. Interviewed employees in the Inspections Department and Central Cashiering group of the Finance Department that collect/process permit application fees;
4. Performed surprise cash counts at the Department of Inspections;
5. Examined the process of charging credit customers;
6. Interviewed the Department of Technology Solutions employee responsible for transferring information from the LDO system to the MUNIS system;
7. Examined the transfer of the on-account balances from the LDO system to the MUNIS system for completeness and accuracy;

OBJECTIVES, SCOPE AND METHODOLOGY

8. Selected a sample of permits issued in the LDO system and ensured that fees were paid and recorded in the MUNIS system;
9. Obtained reports from the LDO system that showed permits issued and fees collected by type of permit for fiscal year 2013;
10. Reconciled the revenue per the LDO system to the revenue per the MUNIS system;
11. Reviewed the processes over issuing credits, adjustments and voids to determine if proper management oversight existed;
12. Verified the controls in place over past due accounts;
13. Obtained and reviewed the aging report;
14. Selected a sample of past due accounts and verified actions taken to collect on them;
15. Documented the process of monitoring timely review of permits;
16. Interviewed the employees in charge of monitoring timely review;
17. Obtained the departmental performance measures for timely review of permit applications;
18. Obtained reports from the LDO system to analyze timely issuance of permits;
19. Analyzed the number of re-reviews conducted for building inspection applications;
20. Documented the permit application/approval process;
21. Interviewed personnel in charge of approving permits;
22. Selected a sample of permit applications to review for:
 - a. Existence of proper supporting documentation necessary in order to perform adequate review;
 - b. Proper approval; and
23. Reviewed the educational background of employees responsible for approving permits and determined if the employees had adequate skills/technical knowledge to review/approve permit applications.

During the audit, staff also maintained awareness to the potential existence of fraud.

Objective 1

To determine if adequate controls existed over cash receipts received from the permit application process

A well-designed set of internal procedures can provide reasonable assurance that significant theft of cash receipts and record keeping errors will be properly managed or detected. The City-County Inspections Department collects a considerable amount of checks and credit card payments on a daily basis. Lack of adequate controls can increase the risk of cash receipts being misappropriated without detection. Audit staff reviewed controls over cash receipts to determine that:

1. Proper safeguards over un-deposited cash receipts are in place;
2. Cash receipts collected are deposited accurately;
3. Segregation of duties existed;
4. Management oversight over the collections and deposits process was adequate; and
5. Adequate controls existed over collections of delinquent accounts.

In addition, Audit staff reconciled the LDO system revenues to the revenues reported in the MUNIS system. The two systems reconciled within an immaterial difference. Audit staff also performed two surprise cash counts. No exceptions were noted.

Effective controls:

- Fees were applied accurately in the LDO system;
- Checks received were endorsed properly;
- A log sheet was maintained to track all payments received each day;
- A processed statement of accounts received from the Central Cashiering group of the Finance Department was reconciled with the log sheet to ensure everything sent to Cashiering was deposited;

AUDIT RESULTS

- Proper controls existed over collections of delinquent accounts;
- Adequate controls existed over the process of issuing refunds and adjustments.

Control deficiencies:

- Lack of segregation of duties existed. One permit technician could collect cash, process the application in the LDO system, send the deposit to Central Cashiering for processing and reconcile the processed statement of accounts to ensure all checks received were deposited. The same technician could also enter the fees received in the LDO system, and process voids and adjustments. Two other employees function as back up and are alternate transaction processors. Lack of segregation of duties can foster an environment that provides opportunity for fraud. Proper segregation of duties aids in mitigating the risk of fraud. In smaller operations, it may not be feasible to entirely segregate all of the cash-related duties. In these circumstances, the department may rely on increased monitoring as a compensating control to mitigate the risk for misappropriation of cash. No evidence existed that management reconciled revenue per the LDO system to revenue reported in the general ledger. The current operating procedures did not incorporate a management review component for the fee collections functions. Comprehensive standard written operating procedures do not exist.
- The staff did not verify if the deposits were processed accurately into the general ledger. Standard operating procedures in place did not incorporate this control. Verifying that deposits were processed into the correct general ledger account would ensure proper recording of revenues for the Department.

AUDIT RESULTS

Overall, adequate controls existed over collections of receipts received from the permit application process. Opportunities for improvement existed in certain categories of transactions as indicated above.

Objective 2

Determine if adequate processes existed to monitor timely review of applications

The City-County Department of Inspections track performance measures related to timely review of applications. The internal standard was to review 90% of the building permits within five business days for residential properties and eight business days for commercial properties.

Audit staff requested that the Technology Solutions Department staff generate reports from the LDO system to help verify the performance measures data. The staff used a manual process to collect the data concerning the performance measures. This manual process was not very efficient. Using the reports generated from the LDO system could help improve the efficiency of staff who track measures. Below are the measure results compiled from automated reports:

Measured Results	FY 2012	FY 2013
Residential Permit Applications (Processed within 5 business days)	89%	71%
Commercial Permit Applications (Processed within 8 business days)	92%	83%
Plumbing Permit Applications (processed within 5 business days)	97%	97%
Mechanical Permit Applications (processed within 5 business days)	98%	98%
Electrical Permit Applications (processed within 5 business days)	96%	96%

AUDIT RESULTS

Management did not meet the 90% target for processing residential permit applications or commercial applications within their respective time frames. There was an 18% decrease in the number of residential permit applications processed within 5 business days from fiscal year 2012 to fiscal year 2013.

Also, there was a 9% decrease in the number of commercial permit applications processed within 8 business days from fiscal year 2012 to fiscal year 2013. Reasons mentioned by management for not meeting the targets included significant changes to the regulations and leave taken by plan reviewers as a result of medical/family emergencies. Additionally, the performance of a couple of plan reviewers attributed to the Department not meeting its target for these two performance measures.

At present, the plan reviewers track the number of re-reviews and initial reviews they perform over a given period. Over a ten month period, approximately 43% of the total applications reviewed for fiscal year 2013 by the five plan reviewers were re-reviews. During the initial review the plan reviewers look for the appropriate supporting documentation and plans based on the nature of the project. If the application has everything required for the plan reviewer to make a decision during the initial review, then the application can be approved. However, if the application is incomplete, then a re-review is necessary. Once the information is re submitted, the plan reviewer performs a re-review. In addition another plan reviewer will also review the application for completeness before final approval. Audit staff could not identify the cause of the re-reviews based on the reports produced from the LDO system. Several reasons could potentially cause re-reviews:

- 1) The applicant does not provide all of the supporting documentation that is necessary for a full and complete review.
- 2) The City does not provide sufficient guidance to ensure citizens provide a complete document.
- 3) Multiple plan reviewers signing off on the final plan review after a re-review can make the process time-consuming.

AUDIT RESULTS

The time spent on re-reviews could potentially cause the plan reviewers to not meet the target for timely review. Analyzing the re-reviews can identify opportunities for improving the efficiency of the permit application review process. At the beginning of field work, even though the plan reviewers tracked the number of re-reviews, it was not a performance measure that management monitored and analyzed.

Management did realize the need to monitor re-reviews; however, by the end of fieldwork management had met with the Home Builders Association to discuss ways to streamline the re-review process. They had also implemented processes and procedures to expedite the re-review process. Performance measures were also established regarding re-reviews.

Objective 3

Determine if adequate controls existed over the permit approval process

Building permit applications are reviewed and approved by five plan reviewers. The Chief Building Inspector oversees the work of the plan reviewers. The Chief Electrical Inspector, the Chief Plumbing Inspector and the Chief Mechanical Inspector review/approve all the trade applications.

Audit staff selected a judgmental sample of 15 residential applications and 15 commercial applications and verified proper approval of the applications by reviewing the approval tab in the LDO system. No exceptions were found.

Effective controls:

- Employees with the appropriate knowledge/technical background should be approving the permits to ensure compliance with regulations. The employees approving the permit applications have adequate qualifications and certifications as required for their respective positions.

AUDIT RESULTS

- There was a process in place to notify the applicant of any disapproved permit applications. If an application is not accepted upon initial review, then the chief inspectors for the building, electrical, mechanical, and plumbing trades contact the applicant immediately so the applicant is aware of the reasons the rejection of the application. The LDO system allows the chief inspectors to send an email to the applicant with comments and the status of the permit application. Building inspection and plumbing inspection use this practice.

Control deficiencies:

- The quality review was sporadic and not documented; however, the standard operating procedure allows for one quality review per month per plan reviewer for building permits. According to the chief inspector, due to the current workload quality reviews have not been performed. The lack of quality reviews could result in: inferior quality of work; or the non-performance of assigned work may not be detected and addressed in a timely manner. One element of internal control is to ensure continuous monitoring of activities through supervision. One aspect of responsible supervision includes monitoring, reviewing and approving the work of those performing an activity to ensure the work is performed correctly.
- A customer service measure that the department tracked was the “Notification of Disapproved Building Permit Applications within One Business Day of Decision”. This measure was not measured correctly. There was no underlying data supporting the measure to verify the accuracy of the results. The measure was reported as 100% unless the department was issued a complaint by a citizen. If there is no underlying data to support the measure, then the measure provides no value in the decision making process.
- The Electrical and Mechanical Inspectors do not have a uniform method of notifying customers if they have an incomplete application. One of the inspectors voided an

AUDIT RESULTS

application so the customer could see online that it was not approved. Another inspector did not take any steps to contact the customer; instead, the inspector waited for the customer to call him. The e-mail feature of the LDO system is not used to notify applicants of issues with their applications. Lack of written standard operating procedures contributes to this situation. Not contacting the customer in a timely fashion could hurt customer service efforts of the department and brand equity of the City.

While reviewing controls over proper permit approval processes, audit staff identified a control deficiency with a contractor. The contractor was hired to convert the paper copies of plans into microfiche for storing plans for future reference. Some plans that come in with applications are so large that they cannot be scanned; so the department has to eventually put them on microfiche. Audit staff randomly selected a sample of 15 residential applications and 15 commercial applications. The Audit staff reviewed the supporting documentation to ensure all of the supporting documentation was maintained. For 25 of the 30 applications, the supporting documentation was verified. Supporting documentation could not be found for five permit applications (four commercial, one residential) either in the department or on microfiche during field work. The supporting documents were subsequently found. Currently, the department does not keep a log of which plans the vendor has. Not maintaining a list of what was taken for conversion could result in lost plans. The likelihood of losing plans is low; and the impact of a lost plan is minimal. According to management, the resources it would take to track the plans when they are issued and when they are returned would outweigh the benefits. The department plans to request contractors to submit digitized plans with the permit application by the end of the current fiscal year.

RECOMMENDATIONS

Recommendation 1

The Department of Inspections staff should develop written standard operating procedures over the fees collections process and the permit application review approval process. The standard operating procedures must include management oversight over these processes by requiring management to perform:

- A reconciliation of the revenues per the LDO system to the revenues per the general ledger; and
- Periodic re-examination of a sample of plans approved by the plans reviewers to assess the performance of the plan reviewers.

Management should ensure that staff complies with the written standard operating procedures.

Recommendation 2

The Department of Inspections staff should use the LDO system generated reports to collect data for performance measures.

Recommendation 3

The Department of Inspections staff should determine if the customer service performance measure “Notification of Disapproved Building Permit Application within One Business Day of Decision” can be measured.

MANAGEMENT'S RESPONSE

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Memo to: Germaine F. Brewington, Director of Audit Services
From: William E. Bradham, Director of City-County Inspections
Date: September 16, 2013
Subject: Management's Response
Permit Application Review Process Performance Audit
(September 2013)

The following is the management's response to the Permit Application Review Process Performance Audit dated September 2013.

Recommendation 1

The Department of Inspections staff should develop written standard operating procedures over the fees collections process and the permit application review approval process. The standard operating procedures must include management oversight over these processes by requiring management to perform:

- A reconciliation of the revenues per the LDO system to the revenues per the general ledger; and
- Periodic re-examination of a sample of plans approved by the plans reviewers to assess the performance of the plan reviewers.

Management should ensure that staff complies with the written standard operating procedures.

Management's Response:

We concur. Management is in full agreement with the recommendation.



Written Standard Operating Procedures will be developed to specifically address these two areas. The Standard Operating Procedures will include a requirement to perform a reconciliation of the revenues in the Land Development Office (LDO) system and in the general ledger (the MUNIS system) at mid-year and at the end of the fiscal year. Also, the Standard Operating Procedures will re-emphasize the requirement of the Senior Plans Examiner to “perform two (2) quality control checks on each Plans Examiner per quarter, and maintain at least 95-97.4% accuracy (average of all results per quarter)”. We already have this particular performance standard in place, but this past year presented a challenge for the Plans Review Division, since the former Senior Plans Examiner resigned, and a new Senior Plans Examiner had to be selected. Also, the workloads in the Plans Review Division were extremely high, and new code changes slowed down the plans review process due to the wide-spread confusion created by some of the code changes.

The Department Director will provide a written response to the Audit Director once the Standard Operating Procedures are completed.

Implementation Date: December 2013.

Recommendation 2

The Department of Inspections staff should use the LDO system generated reports to collect data for performance measures.

Management’s Response:

We concur. Management is in full agreement with the recommendation.

We have already developed customized queries on the Land Development Office (LDO) system, which helps us collect the necessary data. We will develop a Standard Operating Procedure to specify the proper procedures to follow.

The Department Director will provide a written response to the Audit Director once the Standard Operating Procedures are completed.

Implementation Date: December 2013.

Recommendation 3

The Department of Inspections staff should determine if the customer service performance measure “Notification of Disapproved Building Permit Application within One Business Day of Decision” can be measured.

Management’s Response:

We concur. Management is in full agreement with the recommendation.

The Department’s current customer service performance measure regarding “Notification of Disapproved Building Permit Application within One Business Day of Decision” is admittedly a difficult standard to measure. When this standard was first developed, we did not have our current Land Development Office software system in place, and these notifications took place by telephone.

Today, this notification regarding the disapproved status of the building permit application is accomplished by an automated e-mail that is sent out to the applicant’s e-mail account that was listed on the building permit application. This e-mail is an integral part of the review comment process on the Land Development Office software system.

Therefore, since the notification is now automated, and takes place immediately after the Plans Examiners enter their review comments, there is no further need for this customer service performance measure. This measure will be removed from our monthly reports beginning with next months’ report.

Implementation Date: October 2013.