



***METROPOLITAN GOVERNMENT OF  
NASHVILLE AND DAVIDSON COUNTY***

***OFFICE OF INTERNAL AUDIT***

**Professional Audit and Advisory Service**

**Audit of the Metro Nashville Finance Department  
Accounts Payable Process**

Date Issued: July 1, 2010

Office Location and Phone Number

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*The Office of Internal Audit is an independent audit agency reporting directly to the  
Metropolitan Audit Committee*

**EXECUTIVE SUMMARY**  
**July 1, 2010**

Results in Brief	Recommendations
<p>We performed an audit of the processes and controls in place pertaining to the operations of accounts payable in the Metro Nashville Finance Department. Key audit objectives and conclusions are as follows:</p> <ul style="list-style-type: none"> <li>• <i>Were invoices approved in accordance with Metro Nashville’s delegation of authority for purchasing goods and services?</i>  Generally yes. The Office of Internal Audit evaluated the Department of Finances’ procedures and found delegation of authority documentation missing for several departments.</li> <li>• <i>Did invoices for purchases support a valid business purpose, supported by documentation and approved?</i>  Yes. A random sample of 95 paid invoices contained documentation supporting a valid business purpose and approval for procurement.</li> <li>• <i>Were procurement roles adequately segregated?</i>  Yes. Segregation of duties was assigned by employing process control and security control of the EnterpriseOne Accounting software. We found application computer security protected Metro resources.</li> <li>• <i>Were duplicate invoices paid to vendors?</i>  Yes. We observed 20 occurrences of duplicate payments processed through the accounts payable system. All but one occurrence had been identified by Metro Nashville personnel or the vendor prior to our audit test. For the occurrence not previously identified, a \$79,534 duplicate payment was refunded by the vendor when the department responsible for approving the invoice was notified of the duplicate payment.</li> </ul>	<p>Key recommendations were for Finance Department management to:</p> <ul style="list-style-type: none"> <li>• Review the process to handle duplicate payments.</li> <li>• For all departments affected, ensure a document which assigns purchasing authority for a given department has been approved by the Purchasing Director.</li> <li>• Enhance the existing vendor address book audit trail to specifically record changes to key data fields. Division of Accounts management working with the Enterprise Business Systems group implemented a detail address book audit log as of December 2009.</li> <li>• Review the access rights to critical computer check payment files and ensure access is restricted to personnel with a documented business need.</li> </ul> <p>Management’s response can be seen in Appendix A, page 16.</p>

## TABLE OF CONTENTS

INTRODUCTION.....	1
BACKGROUND .....	1
INFORMATION TECHNOLOGY .....	2
OBJECTIVES AND CONCLUSIONS.....	3
OBSERVATIONS AND RECOMMENDATIONS.....	10
A – Duplicate Invoices Are Not Always Detected.....	10
B – Detail Audit Trail of Changes to Vendor Master was not Available .....	11
C – Incomplete Formalized Delegation of Authority for Procurement and Accounts Payable Workflow .....	11
D –Discounts for Early Payments were Missed .....	12
E – Multiple Address for Same Vendor Existed in Vendor Address Book .....	13
F – Users with Update Access to the Payment Disbursement File was Excessive .....	13
STATEMENT OF COMPLIANCE WITH GAGAS.....	15
SCOPE AND METHODOLOGY .....	15
CRITERIA .....	15
STAFF ACKNOWLEDGEMENT .....	15
APPENDIX A. MANAGEMENT RESPONSE.....	16
APPENDIX B. Metro Nashville Delegation of Authority.....	20
APPENDIX C. Metro Accounts Payable Process Flow .....	22

# INTRODUCTION

## AUDIT INITIATION

As part of the annual Audit Work Plan, the Office of Internal Audit conducted an audit of the Metro Nashville Finance Department Accounts Payable process. The basis for conducting this audit was due to the impact this organization has on the financial well-being of the Metro Nashville Government. The Division of Accounts processed 193,494 invoices totaling over \$888 million in payments for fiscal year 2009.

## BACKGROUND

### Demand for Goods or Services

Invoice processing is normally preceded by a demand for goods or services being placed at the Metro Nashville department level. Fulfillment of this demand can be in the form of a contract, purchase order, travel order, procurement card purchase or direct vendor purchase depending on the urgency and value of the goods or services required.

### Vendor Invoice Data Entry and Approval

Upon fulfillment of a demand for goods or services an invoice is received for payment in a Metro Nashville department or the Division of Accounts Payment Services Group. Invoice data entry is decentralized for the high volume departments such as Metro Nashville Public Schools, Water and Sewer Services, Public Works, and the Metro Nashville Police Department. Invoice data entry may also be processed through the centralized Payment Services Group within the Division of Accounts.

For departments that participate in the EnterpriseOne computer system and have the invoices mailed to them, the department may enter and process invoice information. Where the invoice is directly sent to the Division of Accounts Payment Services Group, the document is scanned into the system and the invoice information is entered. Invoices received for goods or services placed on a purchase order will use a two-way match (invoice and purchase order) or three-way match (invoice, purchase order and receiving document) to verify the invoice information. The invoice amount and unit price must match within a predefined tolerance (cannot exceed quantity or unit price – can only be less) for the three-way match. The invoice quantity and/or amount must match with the purchase order amount within the predefined tolerance amount (cannot exceed quantity or amount – can only be less) for the two way match. Purchases not made via a purchase order will be entered directly in the EnterpriseOne system as a standard invoice and will be reviewed and approved as an invoice related to a valid Metro procurement. The proponent for the procurement will approve the invoice using automated workflow within the EnterpriseOne system or through a paper envelope called FASTPak. The paper envelopes contain an approval signature.

### Payment Voucher Approval

Following entry of the invoice information into EnterpriseOne, the invoices are batched into groups and reviewed by Division of Accounts personnel who sample the EnterpriseOne invoice information with the original documents prior to approving invoice payment vouchers.

### Payments

Upon batch approval, the Division of Accounts Manager informs the Office of the Treasurer via an email indicating payments are ready to be paid. Upon receipt of the email, a file is created in the proper format, either electronic or paper check. (In October, 2009, 29% of payments were automated clearing house (ACH), 70% were by paper check and the balance electronic funds transfers). The Accounts Payable Group is then notified by the Office of the Treasurer to update EnterpriseOne with a payment number and post to the system. Depending on the payment form the information is printed and mailed, or sent to the bank for payment. The Office of the Treasurer also creates a positive pay file for the bank to identify valid checks. If any invalid payments are presented to the bank, the Office of the Treasurer is notified.

### Other

Division of Accounts personnel are responsible for processing and payment of invoices along with management of the vendor master files (address book), federal 1099 tax reporting, and State of Tennessee escheat reporting. There are other functions in the Department of Finance that interface with accounts payable, including unclaimed property, general accounting, and purchasing.

## **INFORMATION TECHNOLOGY**

### EnterpriseOne Software

The computer system used to process accounts payable invoices is JD Edward's EnterpriseOne software. The software originally created by JD Edwards is now owned by Oracle Corporation. The Accounts Payable module is integrated into the other financial functions within EnterpriseOne. The Division of Accounts works closely with the Enterprise Business Systems Division (EBS), which is also contained in the Department of Finance, to support their computing needs.

### Ascent Scanning Software

As part of the accounts payable process, scanning software called Ascent is used to scan and store original paper documents.

### SMARTrac

Metro uses the system to manage suppliers. Vendors access the system to add their own information which allows them to participate in Metro procurement process.

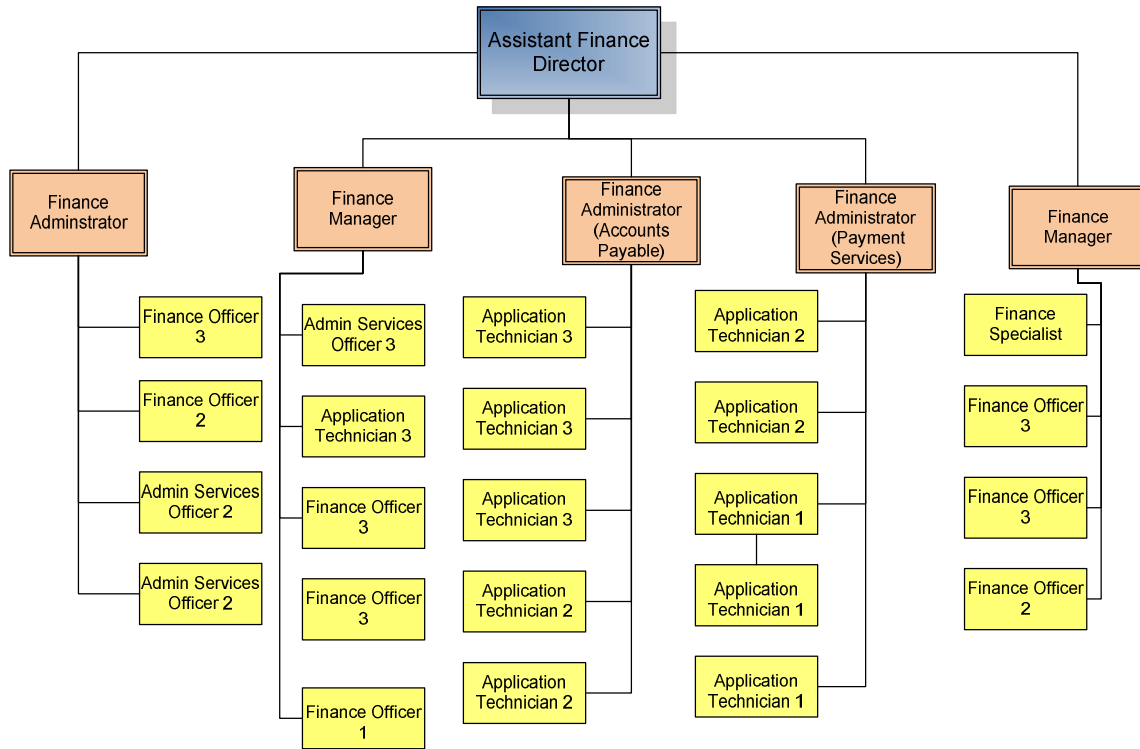
### Ariba

This is the procurement system used by the Metro Nashville Government to manage procurement activity from requisition through receiving.

# ORGANIZATION STRUCTURE

## Exhibit A - Department of Finance Organizational Structure

### Department of Finance



## OBJECTIVES AND CONCLUSIONS

1. *Were invoices approved in accordance with Metro Nashville's delegation of authority for purchasing goods and services?*

Generally yes. The Office of Internal Audit evaluated the Department of Finances procedures to ensure that payments for invoices were for procurements approved in accordance with Metro Nashville Purchasing Agent's delegated authority. We found documentation of purchasing delegation of authority missing for 23 entities. This authority stemmed from the Metropolitan Code of Laws § 4.08.060 and is monitored by Metro Nashville's Purchasing Agent. The Code states procurement can be delegated up to \$10,000. (See Observation C, page 11.)

Five entities are exempt from the Procurement Code per Metropolitan Code of Laws § 4.04.020C, they include Nashville Electric Service, Metropolitan Development and Housing Agency, Metropolitan Nashville Public Schools, Metropolitan Transit Authority, and the Metropolitan Nashville Hospital Authority.

Furthermore, the Office of Internal Audit examined the approval for a sample of payments to determine if proper purchasing delegation of authority was followed as outlined in the Purchasing Delegation of Authority. The results indicated that the delegation of authority was being followed where the current document was maintained by the Purchasing Agent. In some larger departments, the point of contact represented the delegation of authority for that department; however a subsystem of approval was also in place.

2. *Did invoices paid for purchase orders match within the predefined tolerance for goods or services?*

Yes. In order to determine if purchase order prices and quantities agreed with invoices, the Office of Internal Audit obtained a sample of payments and traced the prices and quantity back to the original purchase order in either, Ariba or EnterpriseOne. Of our 95 sample items, we were able to match the price and quantity on all of the items. There were no sample items in which the price and quantity from the purchase order did not agree with the price and quantity on the supporting payment invoice.

3. *Were payments properly classified to the appropriate object account and reporting period for financial reporting?*

Yes. The Office of Internal Audit noted that payments were properly classified to the appropriate object account and reporting period for financial reporting. We used a sample of 119 items to compare the general ledger object account and accounting period to the type of service and date of service described on the invoice. Of the 119 items tested, all were found to have the correct object account and general ledger posting period.

4. *Were procurement roles adequately segregated?*

Yes. Segregation of duties was assigned by employing process control of the business and security control of the EnterpriseOne software. However, a review of user accounts with access privileges to the computer check payment file should be conducted (see bullet '4.e' on page 6).

To examine segregation of duties, the Office of Internal Audit took a three-pronged approach: 1) examined the current processes of accounts payable and related departments, 2) traced invoices for Ariba and EnterpriseOne related purchasing orders, and 3) reviewed EnterpriseOne application security.

#### Process Review

Analysis of process maps showed appropriate segregation of duties was set up in the accounts payable process design.

Based on approval controls set up in Ariba, creation and approval are adequately separated. Orders are not submitted for processing until all

personnel on the approval list have signed off. Orders are received in Ariba by the person who placed the order.

#### Invoice Approval Review

To confirm this process, we examined a sample of payment items to determine if proper segregated approval was carried out per the process flowcharts. The items purchased originated electronically in Ariba (purchase order) or EnterpriseOne (purchase order, direct purchase).

The processing of these purchases was generally electronic via workflow. Some departments, for example, Metropolitan Nashville Public Schools, did not participate in electronic workflow and submitted source documents in paper form using the Metro mailer called a FASTPak.

A sample of 109 items indicated that all items were correctly approved and expected segregation of duties were observed.

#### Application Security

We also examined EnterpriseOne application security privileges to determine if segregation of duties was supported through user computer security roles and privileges. Those tests included the following:

a. Ensure same persons may not create and approve purchase orders.

In the EnterpriseOne system, orders are entered in a given department. Only personnel with security access to the ordering options may place orders and/or receive goods. Within EnterpriseOne there is no specific approval process for submitting an order. This process is applied during payment of invoices using pre-determined approval routes and distribution lists.

For orders in which source documents came to the Division of Accounts in paper form (FASTPaks) the only control provided was the delegation of authority document from the Division of Purchasing. While this document, appoints purchasing authority to a particular employee in the department or organization, it is up to the department to assign the approval flow for each order to ensure segregation of duties.

b. Ensure same persons may not review and approve invoices in standard invoice electronic workflow.

EnterpriseOne electronic workflow for standard invoices is used to document department reviewers and a final department invoice approval. There were cases, due to the size of a department, in which the same person may be a reviewer and approver; however, the payment voucher must still be approved by the Accounts Payable Group in the Division of Accounts which provides an additional control.



- c. Ensure same persons may not enter invoices and maintain the vendor master.

Within system security, the Office of Internal Audit determined that personnel with vendor maintenance access were unable to add, change or delete invoice vouchers with the exception of one instance where a user had access to the vendor address book and the ability to enter invoices. Finance Department management immediately corrected the user's security privileges when this was brought to their attention.

This data was gathered from spreadsheets sent to the Office of Internal Audit by Enterprise Business Systems management, which originated in the EnterpriseOne security table.

- d. Ensure same persons may not approve payment vouchers and create checks or automated clearing house (ACH) payments.

There was no evidence that a person could approve payment vouchers and create checks or automated clearing house payments. The Accounts Payable Group within the Division of Accounts had final control regarding payment of an invoice. Accounts Payable Division of Accounts personnel, with separate security roles from the approvers, created the check and automated clearing house payment file.

- e. Ensure check or automated clearing house (ACH) payment files cannot be modified.

The network file folders, which payment information is temporarily stored during processing, user security privileges allowed more users than necessary to update the payment file (see Observation F, page 13).

- f. Ensure EnterpriseOne security role design and user role assignment do not compromise accounts payable segregation of duty controls.

The Office of Internal Audit examined security for each accounts payable related role and found there was no segregation of duties exceptions within each role. All roles allowed access to only the necessary data.

We also looked at the specific roles assigned to a given user for all users of accounts payable roles. In most cases, each user was assigned to only one security role. There were cases, due to the size of a department, in which the same person may be a reviewer and approver; however, the payment voucher must still be approved by the Accounts Payable Group in the Division of Accounts which provides an additional control.

From this access control method coupled with the current business processes we concluded that proper segregation of duties was being carried out.

5. *Were discounts for early invoice payment taken and processed correctly when they benefit Metro Nashville?*

Generally no. In evaluating department expenditures, the Office of Internal Audit compared available discounts versus lost discounts to determine the benefit gained by Metro Nashville. The payment records examined ranged from July 1, 2007, until March 31, 2009. By comparing available discount to lost discount amounts we determined of the \$63,252 in available discounts only \$5,454 were taken, resulting in discounts missed of \$57,798.

From discussions with Finance management, we were told that invoices received in Metro Nashville departments may not be forwarded to Accounts Payable in a timely manner which would allow available discounts to be taken (see Observation D, page 12).

6. *Were duplicate invoices paid to vendors?*

Yes. Office of Internal Audit test results indicate that duplicate payments have occurred and may continue to occur. When studying the accounts payable process, we did observe EnterpriseOne was configured to prevent the reuse of the same invoice number for the same vendor. However, no additional analytical procedures were deployed to detect or prevent duplicate payments. EnterpriseOne does have a report called "Suspected Duplicate Payments"; however we are unaware of its usage (see Observation A, page 10).

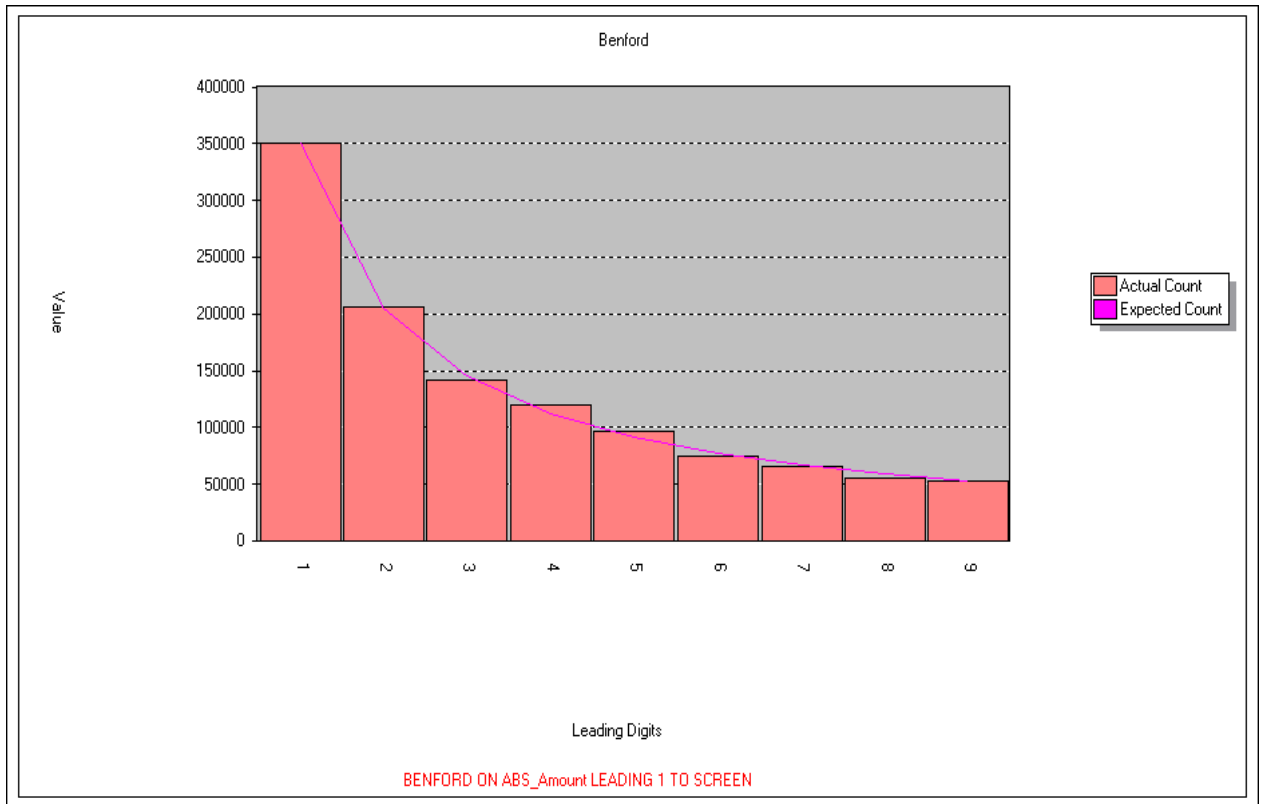
7. *Did the auditors find suspicious payments to vendors when audit tests for red flags of fraud were performed?*

Test 1 - Did analysis of the significant digit for invoice amounts using Benford's Law reveal any unexplained patterns?

No. Based on the Benford analysis, on the invoice payment field in the payment file for the period January 2005 to March 2009, the distributions of numbers followed the Benford standard distribution. We conclude that no fraud, detectible by this test, was occurring.

Benford's Law is based on the theoretical distribution of naturally occurring numbers such as invoice numbers or amounts, for example. When a sufficiently large sample of numbers is examined, Benford's Law states that the leading digit of that sample number will occur based on a theoretical distribution. For instance, a one (1) will occur as the leading digit most often, two (2) the second most often, three (3) the third most and continuing in that order, with nine (9) occurring the least often. This is indicative of the chart in Exhibit B on the next page which shows the bars as the actual numbers observed and the line as the theoretical distribution. If the two series match or are very close, this would indicate that the actual numbers were distributed in a manner that would not suggest fraud.

**Exhibit B – Benford Test for Metro Nashville Paid Invoices January 2005 through March 2009**



**Test 2 - Did any vendor have excessive credit adjustments?**

No. The Office of Internal Audit found no evidence that excessive credit adjustments were being taken. We created a sample of items by compiling a list of payment amounts and credit memo amounts for the period July 1, 2007, to August 31, 2009. We compared the amounts for each of 411 vendors to determine if excessive credit adjustments had been taken.

We observed that the average credit memo to payment percentage was three percent. The variance and standard deviation was one-half a percent and seven percent respectively. A total of 21 vendor's credit memo percent differences were greater than 17%. The range extended from 18% to 100%. Upon examination of these 21 items, we were able to reconcile the credit memo as valid transactions.

**Test 3 - Did the vendor address book contain unexplained multiple occurrences for the same vendor?**

Generally No. Upon examination of the address book and reconciliation with the Division of Account, the Office of Internal Audit determined out of 267 potential vendor accounts with multiple addresses, 27 vendors had single valid addresses, 191 vendors contained valid multiple address and the

remaining 49 vendors contained invalid addresses and could be removed (see Observation E, page 13).

Test 4 - Did the vendor address book contain unexplained blanks, or four or fewer characters in the payee name field?

No. The Office of Internal Audit reviewed the payee name field for the entire vendor file (record types, V=Vendor, R=Remit, and I=Inactive) for blanks, or four or fewer characters. After reviewing all items, the vendor names examined were determined to be valid and did not contain names with blanks, or four or fewer characters

Test 5 - Were frequent changes made to any one vendor address book data?

Undetermined. The Office of Internal Audit was unable to determine the specific information changed on the vendor address book master file because detail change logging was not implemented. The existing change log only contained the vendor, date, and who made the change. The majority of the vendors had two to three changes. The largest number of changes was 38 for one vendor (see Observation F, page 13).

#### Summary

The Office of Internal Audit did not find suspicious payments to vendors in conducting the tests above.

## **OBSERVATIONS AND RECOMMENDATIONS**

### ***A – Duplicate Invoices Are Not Always Detected***

Office of Internal Audit test results indicate that duplicate payments have occurred and may continue to occur. When studying the accounts payable process, we did observe EnterpriseOne was configured to prevent the reuse of the same invoice number for the same vendor. However, no additional analytical procedures were deployed to detect or prevent duplicate payments. EnterpriseOne does have a report called “Suspected Duplicate Payments”; however we are unaware of its usage.

In order to determine if an invoice was a duplicate we extracted invoices from the payments file using the date range of January 1, 2005 through March 31, 2009. We grouped the invoices by date and “cleaned up” invoice number, a process which removed all non-numeric characters. Using special audit software, we identified 1,499 potential duplicates combinations.

From this group, a sample of 35 matching pairs of invoices was reviewed. We observed 20 occurrences of duplicate payments, representing \$2.2 million in excess payments, processed through the Metro Nashville accounts payable system. All but one of these duplicate payment occurrences had been identified by Metro Nashville personnel or the vendor receiving the payment prior to our audit test. For this one occurrence not previously identified, a duplicate payment for \$79,534 was refunded by the vendor when the Office of Internal Audit notified the department responsible for approving the invoice. Additionally, one payment for \$61,450 was made in error to the wrong vendor. As of December 2009, Metro Nashville has not been able to successfully recover this payment error.

#### *Criteria:*

IT Governance Institute’s Control Objectives for Information Technology (COBIT 4.1) – A12.3 *Application Control and Auditability* states: “Implement business controls, where appropriate, into automated application controls such that processing is accurate, complete, timely, authorized and auditable.”

#### *Risk:*

Metro Nashville may spend more money than necessary by paying invoices more than once. These dollars may be measured in the actual duplicate amount and the time and materials necessary to process the payment a second time and recover the duplicate amount.

#### *Recommendation:*

Finance Department management should review the process to handle duplicate payments. Methods may include:

1. Run periodic reports to check for duplicate payments. This report may be coded to flag for duplicate invoice numbers across multiple vendors. A dollar threshold may be set to concentrate this effort to review high dollar payments on a priority basis.

2. Update accounts payable process documents to include duplicate invoice discovery and handling.

### ***B – Detail Audit Trail of Changes to Vendor Master was not Available***

In conducting testing for fraud, we intended to review changes made to the vendor master by reviewing an audit trail available in EnterpriseOne. The report file was available, but it did not provide sufficient detail to determine what information changed in key fields such as the payee name or address fields. At the time of the audit test, the change report only gave date of change, table changed and person who made the change.

*Criteria:*

IT Governance Institute's Control Objectives for Information Technology (COBIT 4.1) – A12.3 *Application Control and Auditability* states: "Implement business controls, where appropriate, into automated application controls such that processing is accurate, complete, timely, authorized and auditable."

*Risk:*

Undocumented changes may be made to a vendor file that would adversely affect Metro Nashville financial operations.

*Recommendation:*

Finance Department management should enhance the vendor address book audit trail to specifically record all changes to specific information items in the record (payee name, address, tax identification, 1099 reporting code, etc). and who has made those changes. Logged information should include the following:

1. Description of change
2. Field changed
3. Date and time of change
4. ID used to make the change
5. Before and after value of information changed

### ***C – Incomplete Formalized Delegation of Authority for Procurement and Accounts Payable Workflow***

There were 23 departments, boards, commissions, officers or agencies ("Departments") who make purchases under the authority of Finance Department Purchasing Division and the Purchasing Director whose authority was not documented within the Finance Department Purchasing Division. This privilege is authorized by the Metro Nashville Purchasing Policy #20 and the Procurement Code of 1992.

Additionally, the Accounts Payable Group has not confirmed department head delegation of authority for accounts payable workflow or FastPak disbursement since the initial set-up for a department or a change in department leadership. Without documentation supporting delegation of authority for accounts payable disbursements processed by workflow or

FASTPak, it is difficult to confirm disbursements were authorized at the time of payment.

*Criteria:*

The document "Purchasing Delegation Authority for 2009" defines the purchasing authority within each department authorized by the Metro Nashville Purchasing Policy. This document is implemented by the use of Delegation of Authority documents signed by each department representative and kept on file in the Purchasing department. This policy holds for all departments except for those specifically exempted in the Metropolitan Code of Laws.

*The COSO Internal Control - Integrated Framework* establishes a common definition of internal controls, standards, and criteria by which organizations can assess their internal control systems. The control environment includes the way management assigns authority and responsibility. The assignment of responsibility, delegation of authority and establishment of related policies provide a basis for accountability and control.

*Risk:*

Disbursements may be made without the approval of Metro Nashville Government management.

*Recommendation:*

1. Finance Department management should ensure a document which assigns purchasing authority for a given department has been approved by the Purchasing Director. This information should be readily available as part of the accounts payable process to ensure that a proper purchasing method is carried out and subsequent payables processing is authorized.
2. Finance Department management should perform an annual confirmation of accounts payable workflow and FASTPak approvals with department heads. Documentation supporting this confirmation should be retained.

## ***D – Discounts for Early Payments were Missed***

Metro is missing out on about 91 percent of discounts available totaling over \$57,000 dollars (July 2007 through March 2009) by not taking full advantage of the discounts available for early payments. Compared to the number of vendors who do business with Metro Nashville Government, the number or vendors who offer discounts is a small percentage. While this percentage may not appear significant the potential savings to Metro is \$57,000 and every effort should be made to avoid losing these discounts. Management has indicated that this may be partially due to the process flow of invoices.

*Criteria:*

Prudent business practices.

*Risk:*

Discounts available for early payment are not realized by Metro Nashville.

*Recommendation:*

Finance Department management should reiterate to Metro Nashville department personnel the importance of timely invoice processing when vendor discounts are available as part of the payment terms.

***E – Multiple Address for Same Vendor Existed in Vendor Address Book***

In the current Vendor Address Book, there are vendors with different address numbers who appear to be the same vendor. In some cases, the vendor has different addresses for the same address type, for instance type V for vendor or type R for remit address.

*Criteria:*

Mary S. Schaeffer, *Accounts Payable Best Practices*, John Wiley & Sons, Inc., Hoboken, New Jersey, 2004, page 88 states: "Once an account has been inactive for over a year, it should be purged from the company's master files – or at least moved to inactive status."

*Risk:*

Duplicate payments could be made to the same vendor. This could occur because the EnterpriseOne software only checks for duplicate invoices within the same vendor address number. Since a single vendor may have multiple vendor address numbers, the potential exists for duplicate payments.

*Recommendation:*

Finance Department management should ensure the EnterpriseOne vendor address book is examined periodically for duplicate vendors. The process should remove or de-activate obsolete address numbers.

***F – Users with Update Access to the Payment Disbursement File was Excessive***

As part of the Treasurer's process, a network folder on a file server is used to temporarily store check print and automatic clearing house (ACH) transmittal files. The files contain Metro Nashville payment information representing in excess of \$888 million in annual disbursements. This network file folder user security privileges allowed more users than necessary to update the payment file. It is difficult to ensure the integrity of payment instructions to Metro Nashville's banking institutions when security privileges to the banking payment transmittal file are not restricted to the absolute minimum number of personnel required for daily payment operations.

The access was defined in Microsoft's Active Directory by grouping user access organizationally. For instance, there was a group of users who are in the Treasury Department who were grouped into one Active Directory security group. Anyone with access to that group had access to the folder.

A review of network security privileges for this computer folder indicated 36 user ids, belonging to two administrator groups and three end-user groups,



had unrestricted and unmonitored update access to this file. The end user groups include Treasury, Payroll, and Business Solutions. The administrator groups were all represented by Information Technology Systems personnel. In addition, external contractors, and a temporary employee have read, write, and delete access within the end-user security groups.

*Criteria:*

IT Governance Institute's Control Objectives for Information Technology (COBIT 4.1) – DS5.3 *Identity Management* states: "... Confirm that user access rights to systems and data are in line with defined and documented business needs and that job requirements are attached to user identities. Ensure that user access rights are requested by user management, approved by system owners and implemented by the security-responsible person...."

*Risk:*

Checks and ACH payments which sum to a very high dollar amount are stored in the Treasury network drive folder, however, potential unauthorized read, write, and delete access may occur by those without a need to have this access.

*Recommendation:*

Finance Department management should review the access rights to computer check payment files and ensure access is restricted to personnel with a business need to access these files. Information technology personnel with administrator access should only access this folder using administrator accounts. Consideration should be given to logging user access to this folder.

# GENERAL AUDIT INFORMATION

## STATEMENT OF COMPLIANCE WITH GAGAS

We conducted this performance audit from June 2009 to January 2010 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our observations and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our observations and conclusions based on our audit objectives.

## SCOPE AND METHODOLOGY

The audit period focused primarily on the period January 1, 2005, through March 31, 2009, financial balances, transactions, and performance on the processes in place during the time of the audit.

The methodology employed throughout this audit was one of objectively reviewing various forms of documentation, including written policies and procedures, financial information, various forms of data, reports, and information pertaining to the Account Payable process. Additionally, management, administrative, and operational personnel were interviewed and directly observed.

## CRITERIA

In conducting this audit, the existing Accounts Payable and Finance Department processes were evaluated for compliance with:

- The Metropolitan Code of Laws
- Metro Finance Policy #20
- Prudent Business Practices
- IT Governance Institute's Control Objectives for Information Technology (COBIT 4.1)
- *The COSO Internal Control - Integrated Framework*.
- Mary S. Schaeffer, *Accounts Payable Best Practices*, John Wiley & Sons, Inc., Hoboken, New Jersey, 2004.

## STAFF ACKNOWLEDGEMENT

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## **APPENDIX A. MANAGEMENT RESPONSE**

- Management's Responses Starts on Next Page -

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY



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June 28, 2010

Mr. Mark Swann  
Metropolitan Auditor  
222 Third Avenue North, Suite 401  
Nashville, TN 37201

Dear Mr. Swann:

This letter acknowledges the receipt of your audit of the Finance Department accounts payable process. We have reviewed the report and agree with all of your recommendations. Most of the recommendations have already been implemented and the rest will be implemented by September 30, 2010.

The Finance Department strives to maintain strong internal controls over Metro's financial transactions and we welcome independent audits of Metro's financial operations. We appreciate the work you have done and value your observations and recommendations.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard M. Riebeling".

Richard M. Riebeling  
Director of Finance

Copy: Kim McDoniel

**Audit of Metro Nashville's Finance Department Accounts Payable Process  
Management Response to Audit Recommendations**

Audit Recommendation	Response to Recommendation / Action Plan	Assigned Responsibility	Estimated Completion
<p><b>A.</b> Finance Department management should review the process to handle duplicate payments. Methods may include:</p> <ol style="list-style-type: none"> <li>1. Run periodic reports to check for duplicate payments. This report may be coded to flag for duplicate invoice numbers across multiple vendors. A dollar threshold may be set to concentrate this effort to review high dollar payments on a priority basis.</li> <li>2. Update accounts payable process documents to include duplicate invoice discovery and handling.</li> </ol>	<p><b>Accept.</b> Division of Accounts is working with Enterprise Business Systems to develop reports that would identify possible duplicate payments. The primary control currently in place is that the system does not allow an invoice number to be entered twice for the same vendor. We will add a process to identify potential situations where the same invoice was entered for two different vendors or potential situations where the department entering invoice information made changes to the invoice number.</p>	<p>Beverly Nabors, Amy Brown and Kim McDoniel</p>	<p>September 30, 2010</p>
<p><b>B.</b> Finance Department management should enhance the vendor address book audit trail to specifically record all changes to specific information items in the record (payee name, address, tax identification, 1099 reporting code, etc.) and who has made those changes. Logged information should include the following:</p> <ol style="list-style-type: none"> <li>1. Description of change</li> <li>2. Field changed</li> <li>3. Date and time of change</li> <li>4. ID used to make the change</li> <li>5. Before and after value of information changed</li> </ol>	<p><b>Accept.</b> Division of Accounts worked with Enterprise Business Systems to develop an address book change log that shows each address book record changed as it was before the change and as it was after the change. This report will be reviewed periodically for any unusual changes or for an excessive number of changes to individual address book records.</p>	<p>Phil Carr and Dawn Clark</p>	<p>Completed</p>
<p><b>C.1</b> Finance Department management should ensure a document which assigns purchasing authority for a given department has been approved by the Purchasing Director. This information should be readily available as part of the accounts payable process to ensure that a proper purchasing method is carried out and subsequent payables processing is authorized.</p>	<p><b>Accept.</b> The majority of the departments/agencies cited have undergone relatively recent personnel changes. The Purchasing Division will ensure that the notebook containing delegated purchasing authority is updated and remains current as changes in departmental personnel occur through an annual confirmation process.</p>	<p>Jeff Gossage</p>	<p>September 30, 2010</p>
<p><b>C.2</b> Finance Department management should perform an annual confirmation of accounts payable workflow and FASTPak approvals with department heads. Documentation supporting this confirmation should be retained.</p>	<p><b>Accept.</b> Current approvals in the AP workflow system will be confirmed with department heads and will be updated annually. For all departments not using workflow, updated signature pages will be sent to department heads for renewal annually.</p>	<p>Beverly Nabors, Ronnie Hargrove, and Kim McDoniel</p>	<p>August 31, 2010</p>

**Audit of Metro Nashville's Finance Department Accounts Payable Process  
Management Response to Audit Recommendations**

Audit Recommendation	Response to Recommendation / Action Plan	Assigned Responsibility	Estimated Completion
<p><b>D.</b> Finance Department management should reiterate to Metro Nashville department personnel the importance of timely invoice processing when vendor discounts are available as part of the payment terms.</p>	<p><b>Accept.</b> A communication was sent to departmental invoice processors to remind them to prioritize paying and approving invoices with vendor discounts within the discount timeframe.</p>	<p>Ronnie Hargrove, Beverly Nabors and Kim McDoniel</p>	<p>Completed</p>
<p><b>E.</b> Finance Department management should ensure the EnterpriseOne vendor address book is examined periodically for duplicate vendors. The process should remove or de-activate obsolete address numbers.</p>	<p><b>Accept.</b> Division of Accounts has just completed a review of address book records that have not been used over a two year period and has deactivated those records. This review will be done annually going forward.</p>	<p>Phil Carr and Dawn Clark</p>	<p>Completed</p>
<p><b>F.</b> Finance Department management should review the access rights to this critical computer check payment files and ensure access is restricted to the personnel with a documented business need. Information technology personnel with administrator access should only access this folder using Administrator accounts. Remove any personal accounts from access. Consideration should be given to logging user access to this folder.</p>	<p><b>Accept.</b> Division of Accounts, Enterprise Business Systems, Treasury and Information Technology Services have worked together to identify the primary and back-up processors needing access to the folder, and access has been limited to those processors. Additionally, the Chief Accountant will receive an e-mail notification should an unauthorized user attempt to access that folder.</p>	<p>Kim McDoniel</p>	<p>Completed</p>

## APPENDIX B. Metro Nashville Delegation of Authority

No	Department	Document Filed	Date
1	Agricultural Extension	Y	2009
2	Airport Authority	Exempt	
3	Arts	Y	2009
4	Assessor	Y	2009
5	Beer Board	Y	2009
6	Chancery Court	Y	2009
7	Clerk & Master	N	
8	Codes	N	
9	Community Education Alliance	N	
10	Council Office	Y	2009
11	County Clerk	Y	2009
12	Criminal Court Clerk	Y	2009
13	Circuit Court Clerk	N	
14	Criminal Justice Planning	N	
15	District Attorney	N	
16	Davidson County Sherriff's Office	Y	2009
17	District Energy Systems	N	
18	Election Commission	Y	2009
19	Economic and Community Development	N	
20	Emergency Communication Commission	Y	2009
21	Farmer's Market	N	
22	Finance	Y	2009
23	General Sessions Court	Y	2009
24	General Services	N	
25	Hospital Administration Nashville General Hospital/Bordeaux Long Term Care	Exempt	
26	Health	Y	2009
27	Historical Commission	N	
28	Human Relations	N	
29	Human Resources	Y	2009
30	Internal Audit	Y	2009
31	Information Technology Services	Y	2009
32	Justice Integration Services	Y	2009
33	Juvenile Clerk	N	
34	Legal	Y, Limited Exemption	2009
35	Library	Y	2009
36	Metro Action Committee	N	
37	Mayor's Office	N	
38	Metro Development and Housing Agency	Exempt	
39	Metro Clerk	Y	2009
40	Metro Nashville Police Department	N	
41	Metro Nashville Public Schools	Exempt	
42	Metro Planning Organization	N	
43	Metro Transit Authority	Exempt	
44	Municipal Auditorium	Y	2009
45	Nashville Career Advancement Center	Y	2006

## APPENDIX B. Metro Nashville Delegation of Authority

No	Dept	Document Filed	Date
46	Nashville Convention Center	Y	2009
47	Nashville Fire Department	N	
48	Nashville Electric Service	Exempt	
49	Office of Emergency Management	Y	2009
50	Parks	Y	2009
51	Planning	Y	2009
52	Public Defender	Y	2009
53	Public Works	Y	2009
54	Register of Deeds	N	
55	Social Services	N	
56	Soil & Water Conservation	N	
57	Sports Authority	N	
58	State Fair	Y	2009
59	State Trial Court	N	
60	Transportation License Commission	Y	2009
61	Trustee	Y	2009
62	Water Services	Y	2009



# APPENDIX C. Metro Accounts Payable Process Flow

