



**A Report to the  
Audit Committee**

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**Deputy Mayor**  
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Robert Brannon  
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Steve Glover  
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**Metropolitan Development and  
Housing Agency  
Procurement-to-Pay Process Audit**

August 2, 2013

Metropolitan  
Nashville  
Office of  
Internal Audit

## EXECUTIVE SUMMARY

August 2, 2013



### Why We Did This Audit

This audit was conducted as part of the approved Metropolitan Nashville Office of Internal Audit 2013 Work Plan.

The audit was initiated based on the number of years that have elapsed since the last audit was conducted by this office.

### What We Recommend

MDHA should segregate the duties within the P-Card process, and utilize customizable access rights and audit trail capabilities within the Yardi system.

For more information on this or any of our reports, email [Mark.Swann@nashville.gov](mailto:Mark.Swann@nashville.gov)

# Metropolitan Development and Housing Agency Procurement-to-Pay Process Audit

## BACKGROUND

The Metropolitan Development and Housing Agency, hereafter referred to as "MDHA," was created to improve housing conditions for low income eligible families and individuals. The mission of MDHA is to create affordable housing opportunities for residents of Nashville, nurture neighborhoods, and build a greater downtown. The majority of funds are received from the federal government.

## OBJECTIVES AND SCOPE

The objectives of the audit were to:

- Determine if controls and procedures were in place to properly manage the procurement-to-pay process for goods and services.
- Determine if applicable KraftCPAs PLLC 2009 report (Review of the Music City Convention Center Construction Project Contracting Practices) recommendations were implemented.

The audit scope included January 1, 2010, through December 31, 2012.

|                 | TRANSACTIONS PROCESSED | VALUE OF TRANSACTIONS |
|-----------------|------------------------|-----------------------|
| Purchase Orders | 448                    | \$5.2 million         |
| Contracts       | 152                    | \$68.0 million        |
| Payments        | 29,358                 | \$194.7 million       |

Also, 24,711 P-Card (like a credit card) transactions were processed totaling \$6.9 million in calendar years 2011 and 2012. United States Department of Housing and Urban Development Section 8 payments were not examined as part of this audit engagement.

## WHAT WE FOUND

In general, MDHA has controls in place to effectively manage the procurement-to-pay process and was following applicable federal and state guidelines for purchasing. However, areas of improvement were noted around purchasing card issuance, computer security, and business continuity. Additionally, all recommendations from the KraftCPAs PLLC 2009 report were implemented.

## GOVERNANCE

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MDHA is governed by a seven member board of commissioners whose purpose is to ensure MDHA policy is implemented and all programs and projects of the agency are adequately developed and operated. There are seven operating departments in MDHA: Administrative Services, Asset Management, Community Development, Construction, Finance, Rental Assistance, and Urban Development.

Procurement of goods and services is accomplished through quotes and competitive bidding with agreements documented by quotes, purchase orders, or contracts. The necessity of procurement is reviewed and authorized by management based on delegated authority limits. Payment for goods and services received is processed by the Finance Department after confirmation of receipt. Micro purchases, valued under \$2,000, are widely purchased using MDHA issued P-Cards.

## OBJECTIVES AND CONCLUSIONS

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*Were controls and procedures in place to properly manage the Procurement-to-Pay process for goods and services?*

**Generally yes.** The Procurement-to-Pay process was managed in a generally effective and compliant manner. However, improvements to processes and documentation will enhance the overall control. Objectives one through six below provide needed supporting detail for the above conclusion.

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### Supporting Objectives and Conclusions

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1. *Were MDHA policies congruent with federal and state guidelines?*

**Yes.** MDHA policies were congruent with United States Department of Housing and Urban Development Title 24 and other criteria such as the administrative requirements for grants. The activities examined were 1) General Procurement, 2) Competition, 3) Methods of Procurement, 4) Contracting with Small and Minority Firms, and 5) Contract Cost and Price.

2. *Was the MDHA procurement process followed at all pricing levels?*

**Generally yes.** The purchasing function was tested to determine if the correct process was followed at all pricing levels and all purchase types. A sample of 85 purchase orders was evaluated from 448 purchase orders. A small number of purchase orders required additional documentation related to prior approval; however, no material exceptions were noted.

Also, three competitively bid major contracts were selected to determine if procurement rules were followed. A checklist was used to determine if all required documents were present. No material exceptions were noted.

3. *Did employee practices support management expectations established in MDHA's P-Card policy?*

**Generally yes.** Overall, we noted that segregation of duties and payment process functions could be improved (see Observation A).

4. *Were suspicious payments to vendors observed when red flags of fraud test were performed for General Disbursement payments?*

**No.** The Office of Internal Audit did not find suspicious payments to vendors in conducting the tests summarized in Exhibit A below.

**Exhibit A – Summary of Audit Tests for General Disbursement Payments**

| Audit Test                                                                                          |
|-----------------------------------------------------------------------------------------------------|
| a) Did the vendor file contain employee addresses?                                                  |
| b) Were check numbers missing in the General Disbursement Register?                                 |
| c) Did duplicate payments exist in the General Disbursement Register?                               |
| d) Did Benford Analysis (fraud detection) reveal possible discrepancies in the data?                |
| e) Did blank payee or abbreviated names (three characters or less) exist in the vendor master file? |

5. *Were system security roles constructed to promote segregation of duties?*

**No.** There was a significant risk for system misuse within the Yardi system. Security settings were the same for the entire department with no further breakdown of security by job title.

At MDHA all Finance Department personnel had complete physical and system access to change addresses, names, and even to create new vendors for the vendor master file (see Observation B).

There were two shared user accounts (not assigned to an employee) defined within the Finance Department security group, two of which had specific tasks but also provided full access to financial functionality. This provides an opportunity for misuse with these accounts (see Observation B).

6. *Were applicable 2009 KraftCPAs PLLC report (review of Music City Convention Center construction project contracting practices) recommendations implemented by management of MDHA?*

**Yes.** Where action was required, the KraftCPAs PLLC 2009 report observations have been resolved by MDHA Management.

## AUDIT OBSERVATIONS

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### ***Observation A: The P-Card process lacked segregation of duties and contained self-review.***

Prudent business practices require segregation of duties in order to maintain the highest level of controls within a process. Without proper segregation of duties, one employee may have an opportunity to perform unauthorized tasks without being detected.

Currently, one member of the Finance Department is responsible for issuing P-Cards, setting up transaction review, performing an overall review, and preparing payment each month. The payment is processed on the last day of the month, but final review by the Director of Finance sometimes occurs after the actual payment date. Additionally, department heads often do not have transactions reviewed by anyone within their respective department.

MDHA issues P-Cards on an as requested basis to help reduce Finance Department cost for processing frequent low dollar value purchases. This extensive card distribution (currently 162 cardholders) increases the risk of P-Card being stolen or used inappropriately. However, no occurrences of misuse or theft were noted.

#### *Recommendations for management of MDHA to:*

1. Segregate the responsibilities for setup of P-Card users, reviewing transactions, and payment of balances. All users should be reviewed for employment status and continued necessity for P-Card usage.
2. Incorporate a more thorough supervisor review process that checks delivery location, taxes paid, and other attributes. As a requirement, the review process should exclude self-reviews and require all three levels of review be performed for all purchases prior to payment.

### ***Observation B: The Yardi Voyager<sup>1</sup> system vendor master audit trail was not implemented. Also, user privileges allowed widespread, generic access and did not grant access based on departmental role and functions.***

The State of Tennessee Internal Control and Compliance Manual recommends that computer systems have an unalterable audit trail. Additionally, International Standards Organization (ISO) 27002, Part 11 states, "All users should have a unique identifier for their personal use so that all activities can be traceable to responsible individuals. A suitable authentication technology (or technologies) should be in place to substantiate the claimed identity."

The Finance Department had all financial duties assigned to all active members of the department. MDHA management chose to do this as employees often cross train due to limited staff. There were two shared user accounts defined within the Finance Department security group, two of which had specific tasks but were also given full access to financial functionality. As a result, the specific employee performing a function may not be identifiable. Additionally, an employee may perform unauthorized tasks.

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<sup>1</sup> Yardi Voyager is the computer systems used by MDHA to manage fiscal affairs and daily operations.

*Recommendation for management of MDHA to:*

1. Refine the security on shared user accounts to only allow the functionality needed and assign responsibility for activity processed by these accounts to an individual employee. All roles should be defined based on need and user activity traced through the Yardi audit trail capabilities.

***Observation C: Only one copy of purchasing and finance documentation exists.***

Prudent business practice requires adequate planning for rapid business resumption after a catastrophe. The practice of keeping only one hard copy of purchasing and finance documentations leaves MDHA business operations in a position of risk should a fire or other event destroy files.

*Recommendation for management of MDHA to:*

1. Investigate and implement a backup system for business data records that will provide assurance that data used to operate business activity can be recovered in a disaster.

## **GOVERNMENT AUDITING STANDARDS COMPLIANCE**

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We conducted this performance audit 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 findings 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.

## **METHODOLOGY**

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To accomplish our audit objectives, we performed the following steps:

- Interviewed key personnel within MDHA.
- Reviewed and analyzed documentation for compliance with the United States Housing and Urban Development Administration and other applicable laws, regulations, and policies.
- Evaluated internal controls currently in place.
- Reviewed sample selections to determine the effectiveness of internal controls.
- Considered risk of fraud, waste, and abuse.
- Considered information technology risks.

## **AUDIT TEAM**

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Carlos Holt, CPA, CIA, CGAP, CFE, Audit Manager

Joe McGinley, CISSP, CISA, Auditor-in-Charge

Lauren Riley, CPA, Auditor

**Metropolitan Development and Housing Agency**

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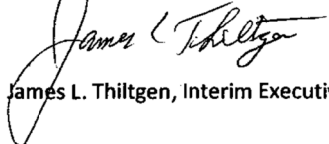
Mr. Mark Swann, Metropolitan Auditor  
Office of Internal Audit  
222 3<sup>rd</sup> Avenue North, Suite 401  
Nashville, TN 37201

RE: Audit of the MDHA Procurement-to-Pay Process

Dear Mr. Swann:

This letter acknowledges that Metropolitan Development and Housing Agency has received the Procurement-to-Pay Process audit report and has reviewed the audit comments and recommendations. MDHA was able to implement some of the recommendations immediately. We will continue to research and determine the appropriate action on the remaining recommendation.

Sincerely,



James L. Thiltgen, Interim Executive Director

Enclosure



## APPENDIX A – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

We believe that operational management is in a unique position to best understand their operations and may be able to identify more innovative and effective approaches and we encourage them to do so when providing their response to our recommendations.

| Recommendation                                                                                                                                                                                                                                                                                                    | Concurrence and Corrective Action Plan                                                                                                                                                                                                     | Proposed Completion Date |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <p><b>A.1</b> Segregate the responsibilities for setup of P-Card users, reviewing transactions, and payment of balances. All users should be reviewed for employment status and continued necessity for P-Card usage.</p>                                                                                         | <p><b>Agree:</b> The responsibilities for P-card duties have been segregated. All user employment status and continued necessity for p-card usage have been confirmed.</p>                                                                 | <p>7/31/2013</p>         |
| <p><b>A.2</b> Incorporate a more thorough supervisor review process that checks delivery location, taxes paid, and other attributes. As a requirement, the review process should exclude self-reviews and require all three levels of review be performed for all purchases prior to payment.</p>                 | <p><b>Partially Agree:</b> Supervisors will be reminded to conduct a thorough review of invoices; self-reviews will be eliminated where possible; all 3 levels of review will be completed by the date of payment.</p>                     | <p>7/31/2013</p>         |
| <p><b>B.1</b> Refine the security on shared user accounts to only allow the functionality needed and assign responsibility for activity processed by these accounts to an individual employee. All roles should be defined based on need and user activity traced through the Yardi audit trail capabilities.</p> | <p><b>Accept Risks:</b> Shared user accounts and the authorization to add/edit the vendor files are limited to 2 finance staff members; audit reports have been installed to track activity on the user accounts and the vendor files.</p> | <p>7/31/2013</p>         |
| <p><b>C.1</b> Investigate and implement a backup system for business data records that will provide assurance that data used to operate business activity can be recovered in a disaster.</p>                                                                                                                     | <p><b>Agree:</b> The agency will investigate the availability of a viable backup system; if a system is identified and funding is available, every effort will be made to implement.</p>                                                   | <p>9/30/2014</p>         |