**A Report to the
Audit Committee**

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Audit of Metropolitan Nashville Fire Department Payroll Process

July 24, 2015

Metropolitan
Nashville
Office of
Internal Audit

AUDIT OF METROPOLITAN NASHVILLE FIRE DEPARTMENT PAYROLL PROCESS

Why We Did This Audit

The audit was initiated due to the complexity and significant expense incurred for Fire Department payroll.

What We Recommend

- Restrict access to information systems to least privilege principle.

- Develop reports to reconcile compensatory payroll activities between the TeleStaff scheduling and time entry and EnterpriseOne payroll systems.

- Update policies and procedures.

For more information on this or any of our reports, email Mark.Swann@nashville.gov

BACKGROUND

In fiscal years 2013 and 2014, 1,282 employees worked for the Metropolitan Nashville Fire Department, including new-hires and terminated employees. Total payroll expenses were over $70 million and over $69 million, respectively, representing 63 percent of the Metropolitan Nashville Fire Department's total annual expenditures for both years.

OBJECTIVE AND SCOPE

The objective of this audit was to obtain reasonable assurance that controls were in place and effective pertaining to payroll processing for the department.

The audit scope covered all payrolls periods between July 1, 2013, and December 31, 2014.

Pay Type	Fiscal Year 2013 Actuals	Fiscal Year 2014 Actuals
Regular Pay	$47,063,873	$48,930,827
Paid leave	17,549,001	15,085,546
Overtime	2,099,320	1,908,162
Injury-in-line of duty	1,676,524	1,472,544
Out of Class Pay	354,923	332,024
Shift differential pay	101,211	114,752
Other *	1,251,137	1,164,640
Total	**$70,095,989**	**$69,008,495**

Source: Metropolitan Nashville Enterprise One accounting system
*: The "Other" category includes longevity pay (a Metro Central Human Resource process) and training stipend funded by the State after fire fighters complete mandatory trainings.

WHAT WE FOUND

The Metropolitan Nashville Fire Department generally had controls in place to ensure payroll processing was accurate. However, it was difficult to demonstrate that all compensatory payroll activities and pay types were approved, and user access to information systems was not so restrictive to ensure integrity of time records through segregation of duties and least privilege principles.

GOVERNANCE

The governing rules pertaining to employee payroll included Fair Labor Standard Act, Metropolitan Nashville Civil Service rules, and a Memorandum of Understanding between Metropolitan Nashville and International Association of Fire Fighters.

Metropolitan Nashville Fire Department uses TeleStaff software for approving staff schedules and negative pay time exceptions. All supervisory ranks make sure the minimum staffing requirement is met under their management. Metropolitan Nashville Fire Department Finance management oversees the payroll process. Payroll preparers export time records for exception pay to a spreadsheet, make required adjustments, and import the records to Metropolitan Nashville's central accounting system EnterpriseOne.

OBJECTIVES AND CONCLUSIONS

1. *Were controls in place and effective pertaining to the payroll process?*

    Generally yes. The Metropolitan Nashville Fire Department had established policies and procedures pertaining to events which may impact employee payroll. Controls existed and were generally working. Supporting objectives tested were:

    ### Supporting Objectives and Conclusions

    a. *Were controls in place to ensure worked hours were accurately recorded and approved?*

    Generally yes. The Metropolitan Nashville Fire Department had established policies and procedures covering events which may impact the employee payroll process. There were built-in controls in the TeleStaff system, which the department used for time keeping. Configuration of these controls could be strengthened to improve the integrity of time records. See Observations A and B.

    b. *Was overtime recorded and paid with approved rates?*

    Yes. A review of 47 randomly sampled employee overtime records showed that approved rates were used in calculating overtime compensation.

    c. *Were injuries in line of duty approved, recorded, and paid in accordance with Civil Service Rules?*

    Generally yes. Record keeping for eligible injury on duty staff should be improved. See Observations B.

    d. *Were act-in-charge events recorded and paid in accordance with Civil Service Rules?*

    Generally yes. The department had procedures in place to maintain chain of commands in operations. A training program was available for employees who were willing to act in charge when there was a need to ensure chain-of-command. However, the department should ensure that the procedure and practice were in line with Civil Services Rules. See Observation B.

    e. *Were new hires, increments, and class changes approved, recorded, and paid in accordance with Civil Service Rules?*

    Yes. A review of 47 randomly sampled employee records showed that Civil Service Rules were followed in practice.

AUDIT OBSERVATIONS

Internal control helps entities achieve important objectives and sustain and improve performance. The Committee of Sponsoring Organizations of the Treadway Commission (COSO), *Internal Control – Integrated Framework (2013 Framework)*, enables organizations to effectively and efficiently develop systems of internal control that adapt to changing business and operating environment, mitigate risks to acceptable levels, and support sound decision making and governance of the organization. The audit observations listed are offered to assist management in fulfilling their internal control responsibilities.

Observation A – Payroll Information Systems Security

User permissions in payroll information systems should be strengthen. The following concerns existed in the systems relied upon to process payroll information:

TeleStaff System

- Several application security roles allowed individual users to enter and approve time entries because the roster "Fix, Finalize" setting was assigned to authorities such as Full Access (assigned to six employees), HR Staffer, HR Support, PR Staffer (assigned to three employees), and PR Support.

- Access to the payroll export file was not restricted to payroll preparers only.

TeleStaff Excel Interface With EnterpriseOne

- Payroll preparers made adjustments in the spreadsheet exported from TeleStaff before loading the time records to EnterpriseOne for actual payroll calculation. These adjustments were necessary due to either administrative reasons (payroll adjustment forms) or the fact that hours need to be converted to shifts for flat rate pay types such as travel and out-of-class. This extra step may introduce accidental and/or intentional errors to the payroll calculation without being detected since the spreadsheet did not have the capability of tracking historical changes.

- Time records in TeleStaff were extracted into an Excel spreadsheet by department payroll preparers using a script provided by the vendor. This script contained a system user name and password which allowed direct access to the database. Access to this script was not restricted only to the persons who have the business needs (payroll preparer).

Management of the Fire Department promptly removed unnecessary access rights when it was brought to their attention.

Criteria:
- Metropolitan Nashville Information Security Policy
- COSO, Control Activities – Principle 11 (The organization selects and develops general control activities over technology to support the achievement of objectives.)

Recommendations for management of the Metropolitan Nashville Fire Department to:
1. Review the business processes to identify specific access needs for information systems users, define and assign proper access rights to users to ensure that least privileged permissions are granted to all users. Specifically, the security settings for concerned authorities in TeleStaff to ensure the "fix, finalize" setting is only assigned to those who are authorized to approve

timesheets. Also, the TeleStaff export/import file access control list privileges should be on a least privileged basis.

2. Evaluate the possibility and feasibility of making all necessary payroll adjustments in either TeleStaff or EnterpriseOne, where audit trails are available.

3. Evaluate the possibility to automate the spreadsheet exporting/importing process between the TeleStaff and EnterpriseOne systems.

Observation B – Reconciliation of Payroll Systems

It was difficult to demonstrate that all compensatory payroll activities (overtime, out-of-class pay, injury on duty, etc.) were approved by Fire Department management. This was because Fire Department personnel compensatory worked hours did not always match between the TeleStaff scheduling and time entry system and the EnterpriseOne payroll system due to limitations with the TeleStaff system and required manual adjustments not being consistently documented.

Criteria:
COSO, Control Activities – Principle 10 (The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels.)

Recommendations for management of the Metropolitan Nashville Fire Department to:
Develop managerial reports to reconcile all compensatory payroll activities between the TeleStaff scheduling and time entry system, and EnterpriseOne payroll system.

Observation C – Update Policies and Procedures

The Fire Department's Operational Procedures and Guidelines have not been revised to reflect current practices.

Criteria:
COSO, Control Activities – Principle 12 (The organization deploys control activities through policies that establish what is expected and procedures that put policies into action.)

Recommendation for management of the Metropolitan Nashville Fire Department to:
Review and update Fire Department operational policies and procedure to provide consistent guidance for the meaning of "work day".

GOVERNMENT AUDITING STANDARDS COMPLIANCE

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.
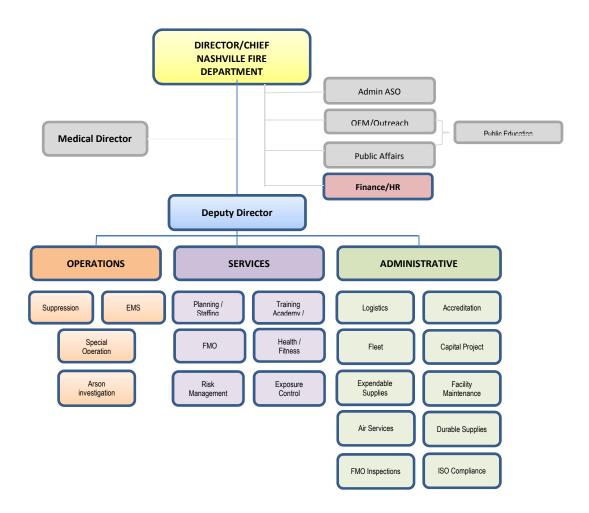
METHODOLOGY

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

- Interviewed key personnel involved in the entire payroll process.
- Reviewed and analyzed documentation for compliance with Metropolitan Nashville Civil Service Rules and Policies, and other applicable laws, regulations, and policies.
- Evaluated internal controls currently in place.
- Reviewed sample selections to determine the effectiveness of internal controls.
- Reviewed payroll transaction files using analytical audit software.
- Considered risk of fraud, waste, and abuse.
- Considered information technology risks.

AUDIT TEAM

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Finance/HR

Medical Director

Deputy Director

OPERATIONS	SERVICES	ADMINISTRATIVE

OPERATIONS		SERVICES		ADMINISTRATIVE	
Suppression	EMS	Planning / Staffing	Training Academy /	Logistics	Accreditation
Special Operation		FMO	Health / Fitness	Fleet	Capital Project
Arson investigation		Risk Management	Exposure Control	Expendable Supplies	Facility Maintenance
				Air Services	Durable Supplies
				FMO Inspections	ISO Compliance

KARL F. DEAN
MAYOR

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

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July 24, 2015

Office of Internal Audit
Mr. Mark Swann, Metropolitan Auditor
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RE: Audit of the Nashville Fire Department – Payroll Process

Dear Mr. Swann:

This letter acknowledges that the Nashville Fire Department received the payroll process audit and has reviewed the audit comments and recommendations. The department implemented many of the recommendations prior to completion of the fieldwork by your staff and will continue to implement recommendations as appropriate.

It is important to acknowledge that the two fiscal years examined were the years when the Maximus Audit was issued and implemented. The Department welcomes recommendations and will continue to strive to efficiently and effectively process payroll.

It was a pleasure working with your staff on this project.

Sincerely,

Richard T. White
Director-Chief

APPENDIX B – 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.

Recommendations	Concurrence and Corrective Action Plan	Proposed Completion Date
Management of Metro Nashville Fire Department should:		
A1. Review the business processes to identify specific access needs for information systems users, define and assign proper access rights to users to ensure that least privileged permissions are granted to all users. Specifically, the security settings for concerned authorities in TeleStaff to ensure the "fix, finalize" setting is only assigned to those who are authorized to approve timesheets. Also, the TeleStaff export/import file access control list privileges should be on a least privileged basis.	**Accept.** This was completed prior to the end of the audit. Roles were restricted within segregation of duties limitations.	Completed
A2. Evaluate the possibility and feasibility of making all necessary payroll adjustments in either TeleStaff or EnterpriseOne, where audit trails are available.	**Partially Reject.** Telestaff is a scheduling and staffing software, not a payroll software. It will not accept all changes needed to process a payroll. For example, the conversion of days to hours/shifts with IOD cannot be completed in Telestaff. In an effort to efficiently and effectively process the payroll, most adjustments are made in Telestaff. Any other necessary adjustments are documented through emails, forms, or reconciliation and adjusted in the Export/Import file. Manual entry of adjustments in EnterpriseOne is not an effective or efficient use of resources.	
A3. Evaluate the possibility to automate the spreadsheet exporting/importing process between the TeleStaff and EnterpriseOne systems.	**Partially Reject.** We contacted Telestaff starting over 2 years ago requesting an interface into EnterpriseOne. Their solution was the Excel Export/Import file that we use today. Complete automation without human intervention is not achievable based upon recent discussions with Telestaff. Telestaff is a scheduling and staffing software; it is not a payroll system. We would need additional funding to purchase a new scheduling and staffing software that can interface without human intervention to EnterpriseOne.	

APPENDIX B – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

Recommendations	Concurrence and Corrective Action Plan	Proposed Completion Date
B. Develop managerial reports to reconcile all compensatory payroll activities between the TeleStaff scheduling and time entry system, and EnterpriseOne payroll system.	**Accept.** We are enhancing our process for reconciling compensatory payroll activities.	September 1, 2015
C. Review and update Fire Department operational policies and procedure to provide consistent guidance for the meaning of "work day".	**Accept.** We are reviewing and updating general orders and OPGs to establish and clarify the definition of work schedule to comply with Civil Service Rules and be applied consistently across divisions.	September 1, 2015