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Audit Report

**PREVENTIVE
MAINTENANCE
PROGRAM**

As of April 2017

**Office of the Controller
County of Northampton
Pennsylvania**



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Members of the Northampton County Council
John A. Brown, County Executive
County of Northampton, Pennsylvania

We have completed an audit of the County's Preventive Maintenance Program as of April 2017. The Executive Summary on page 1 summarizes the audit results, while the Audit Results section provides a detailed explanation.

We acknowledge the cooperation and assistance we received from the Public Works Department. Their help was essential to the performance of this audit.

Management did not issue a written response to this report.

Very truly yours,

Stephen J. Barron, Jr., CFE
County Controller

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EXECUTIVE SUMMARY

The Department of Public Works has done a remarkable job of using existing software owned by the County as a cost-effective solution for the needs of an automated preventive maintenance system, featuring automatic notifications and controls over which individuals can close tickets. User manuals have been digitized and incorporated into the electronic record which makes the preventive maintenance process more efficient. We encourage the Public Works Department to continue to make improvements as opportunities arise. The County should resolve policy conflicts which assign preventive maintenance on vehicles to two separate entities and Public Works should issue regular reports to County Council so that Council can properly monitor the program.

INTRODUCTION

On April 14, 2014, County Council passed Resolution 38-2014 requesting that our office conduct a performance audit of the Northampton County preventive maintenance program. The Resolution requested that the audit focus on the following areas:

- Is there a written maintenance management plan that has the correct levels of approval?
- Is there evidence that the maintenance management plan is being followed?
- Is there evidence that the maintenance management plan has the correct level of management oversight and instances of non-compliance are routinely escalated to the required level of County Administration?
- Is there a semi-annual report to the County Council on the operations of the preventive maintenance program?

Our office deferred the performance of this audit until the current year. In the interim, the Department of Public Works developed an automated preventive maintenance program using the County's IssueTrak system, which is a commercial software purchased to automate and manage Public Works and Information Technology (IT) user issues. The County considered purchasing a separate software package designed to manage maintenance issues, but prices were exorbitant and the decision was made to develop a solution in-house. This project was spearheaded by the Deputy Director of Public Works with the assistance of others in that Department and by the time of our audit, was approximately 75% complete.

Public Works has built a timeline of maintenance into the system. Tickets are generated automatically, as are e-mails assigning work to staff. Supervisors are able to see when work is complete and warning notices are sent to Supervisors if a ticket is not closed on a timely basis. The Director and Deputy Director of Public Works can also monitor this activity. Only Supervisors can close tickets, which prevents work from being done wrong or incomplete. Certain building maintenance items such as roof inspections have not been built into the system as yet, but Public Works is continuing to add functionality to the system.

To make preventive maintenance even more organized, user manuals have been digitized and attached to the asset records themselves in the system, making it easy for technicians to refer to these by just clicking on them. Some manuals for older items are not available, but a website exists called Manuals Online, which offers downloadable users manuals. Public Works continues to find manuals for County-owned assets at this site.

The County is currently tracking assets at the Human Service Building, but since the building is leased, the County is not currently responsible to perform preventive maintenance. However, the County may acquire that building, and the assets will have been sufficiently tracked so that adding the assets in that

building will not be difficult.

It should be noted that some preventive maintenance is performed by County employees and some is performed by vendors. Fire extinguishers, back flow preventers, sprinkler heads, security systems etc. are performed by independent vendors. Boilers, chillers and other items are handled by the McClure Company as part of the GESA contract. Vendor maintenance activity is currently not tracked through IssueTrak, but it is the intent of Public Works to include this in the future.

PURPOSE AND SCOPE

The purpose of our audit was to comply with the requirements of Resolution 38-2014 in assessing the adequacy of the County's preventive maintenance program. As the automated aspect of this program is a work in progress, we looked at the most recent activity as representative of its current status.

METHODOLOGY

Our methodology included a review of the design of the IssueTrak Preventive Maintenance module. This involved detailed demonstrations and interviews with the Deputy Director of Public Works to gain an understanding of how the program works and how comprehensive it is in covering the County's preventive maintenance issues.

Our testing included selecting ten issues from the month of August, 2017 and observing the various screens to determine if maintenance was performed timely and with adequate documentation. For items selected for sample, we reviewed history screens to determine if frequency of maintenance was adequate.

Our review included an assessment of internal controls in the audited areas. Any significant findings related to internal controls are included in the Audit Results section of the report.

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 findings and conclusions based on our audit objectives.

AUDIT RESULTS

Section A – Compliance

1. Maintenance Duties – Motor Vehicles

OBSERVATION

Section 7.02 (7) of the County’s Administrative Code states that the Director of Public Works is responsible to “direct the administration of programs for operating, maintaining, repairing, and providing custodial services for all County-owned buildings and equipment, including motor vehicles.” However, section 3.701, Vehicle Safety, of the Human Resources Policies and Procedures Manual states that each department with a vehicle will appoint a Departmental Vehicle Designee, whose duties include coordinating aspects of the vehicle program such as maintenance and repairs.

According to the Director and Deputy Director of Public Works, County Administration follows the Employee Manual with regard to vehicle maintenance rather than the Administrative Code, and therefore takes responsibility for the maintenance of only those vehicles utilized within their department.

RECOMMENDATION

We recommend that the County decide which entity should be responsible for the maintenance of County vehicles and rewrite either the Administrative Code or the Employee Manual accordingly. We believe it makes sense to have user departments responsible for maintenance on vehicles they operate.

Section B – Internal Controls

1. Semi-Annual Reports to County Council

OBSERVATION

In Resolution 38-2014, County Council requested that our office determine if there is a semi-annual report from Public Works to them on the operations of the preventive maintenance program. We found that there currently is none, but there is a statistical report available in the IssueTrak system which would serve as a good basis for a report to Council

RECOMMENDATION

We recommend that Public Works issue a semi-annual report to Council regarding the preventive maintenance program, using IssueTrak reports which provide summaries of issues handled.