

**TRANSPORTATION & STORMWATER SERVICES  
FLEET & EQUIPMENT MAINTENANCE  
AUDIT 17-12  
FEBRUARY 22, 2018**



# CITY OF TAMPA

Bob Buckhorn, Mayor

Internal Audit Department

Christine Glover, Internal Audit Director

February 22, 2018

Honorable Bob Buckhorn  
Mayor, City of Tampa  
1 City Hall Plaza  
Tampa, Florida

RE: Transportation & Stormwater Services (TSS) Fleet & Equipment Maintenance, Audit 17-12

Dear Mayor Buckhorn:

Attached is the Internal Audit Department's report on TSS Fleet & Equipment Maintenance.

We thank the management and staff of the Department of TSS for their cooperation and assistance during this audit.

Sincerely,

/s/ Christine Glover

Christine Glover  
Internal Audit Director

cc: Dennis Rogero, Chief of Staff  
Sonya Little, Chief Financial Officer  
Ernest Mueller, Chief Assistant City Attorney  
Brad Baird, Administrator of Public Works & Utility Services  
Jean Duncan, Director of Transportation & Stormwater Services  
Peter Brett, Manager of Transportation & Stormwater Operations

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/s/ Stephen Mhere

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Auditor

/s/ Christine Glover

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Audit Director

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**BACKGROUND**

The City of Tampa (COT)'s Department of Transportation & Stormwater Services (TSS) is responsible for building and maintaining transportation and storm water infrastructure. Its functions are very critical to the citizens of the City. They include providing safe mobility by maintaining right of way assets like roads, traffic signs and signals, pavement markings, storm water drainage, and movable bridges. In addition to Customer Service, there are three divisions in TSS, namely Transportation Engineering, Stormwater Engineering, and TSS Operations.

For its operations, TSS uses various assets and resources including vehicles, large equipment, and small tools. As of June 30 2017, there were 201 fuel-powered, motorized equipment assigned to TSS, including vehicles. Inventory records for small equipment showed a count of 134 small tools, including items such as saws, generators, jackhammers, coring drills, and compressors. Maintenance, of these assets, is the responsibility of Equipment Facility and Yard Operations (EFYO), a unit in TSS Operations. EFYO is staffed with five members: two technicians, two traffic maintenance specialists, and the EFYO coordinator/supervisor.

**STATEMENT OF OBJECTIVES**

This audit was conducted in accordance with the Internal Audit Department's FY 2017 Audit Agenda. The objectives of the audit were to determine that:

1. TSS has a program in place for the appropriate maintenance of vehicles and equipment assigned to the TSS Department.
2. Adequate internal controls have been implemented to provide reasonable assurance that TSS' maintenance practices are congruent with COT policies, including policies on fleet and equipment maintenance.

**STATEMENT OF SCOPE**

This audit evaluated TSS activities relating to maintenance of department vehicles and equipment during FY 2016 and 2017. We evaluated internal controls for the maintenance program, including physical security for the small tools workshop at the department's yard operations facility. The department's credit card purchases were also evaluated, but this was limited to purchase card (p-card) records for the acquisition of repair supplies only.

**STATEMENT OF METHODOLOGY**

We reviewed TSS internal reports, observed its activities, and documented its processes related to vehicle and equipment maintenance. We obtained relevant fleet maintenance policies and

reports from COT's Fleet Management Division (Fleet) and compared them to TSS' practices, particularly in vehicle and equipment inspections, planned maintenance, and vehicle utilization. We reviewed the Revenue & Finance Department's inventory policies and used them as a basis for comparison with TSS' inventory practices in its small tools workshop. We evaluated the department's p-card processes against industry best practice standards for accounting in purchasing.

We interviewed the TSS manager about his views on the maintenance program in general and possible fraud and waste in particular. We also interviewed the EFYO coordinator about general yard operations. We consulted with COT's fleet manager regarding general fleet maintenance policies and standards, and the division's role in TSS' maintenance program. Fleet management reports used in this audit were produced in the FASTER system, which was deemed reliable in a previous audit.

### **STATEMENT OF AUDITING STANDARDS**

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 CONCLUSIONS**

Based upon the test work performed and the audit findings noted below, we conclude that:

- 1) TSS has a program in place for the appropriate maintenance of vehicles and equipment assigned to it.
- 2) While TSS has implemented internal controls in some aspects of its fleet and equipment maintenance program, more can be done to make the program work better.

## **POLICIES AND STANDARD OPERATING PROCEDURES**

**STATEMENT OF CONDITION:** TSS uses small tools, various types and sizes of equipment, and a fleet of vehicles to carry out its daily operations. As of June 2017, reports showed TSS had at least 201 motorized equipment in addition to 134 small tools.

TSS Operations' EFYO unit is responsible for coordinating the maintenance of these different assets while actual maintenance work is performed by various entities. Generally, the EFYO maintains all small tools and Fleet maintains all vehicles and large equipment. Outside warrantors (e.g., dealerships) maintain all newer vehicles still under warranty, and other outside vendors maintain vehicles that are sent to them under the citywide sublet program administered by Fleet. In all these circumstances, the EFYO unit coordinates maintenance activities, from getting the vehicle out through bringing it back into service at TSS.

Currently, TSS Operations does not have documented policies and/or standard operating procedures to provide guidance on how best to carry out its maintenance functions. According to TSS, an outside contractor has been hired to help establish a policy/standard operating procedure (SOP) manual.

**CRITERIA:** All COT departments are required, under provisions of Chapter 2-46 of the municipal code, to create and maintain proper documentation of their functions, policies and procedures. Also, documented policies and/or SOPs are essential for an effective internal control system. Last but not least, documentation of policies and procedures is important for the retention of an organization's operational knowledge and employee training.

**CAUSE:** TSS Operations has not put together a comprehensive maintenance policy manual likely because the bulk of the required maintenance, that of vehicles and equipment, has been outsourced to Fleet. Also, practically all vehicles, equipment, and small tools, are acquired from manufacturers with their own manuals, making it appear implausible to spend time and effort creating a comprehensive policy or SOP manual.

**EFFECT OF CONDITION:** The absence of a documented policy manual could result in inconsistencies in the fleet and equipment maintenance activities as well as employee training. The negative impact TSS Operations Division suffers when it loses institutional knowledge is compounded when there are no documented policies or SOPs to fill the gap.

**RECOMMENDATION 1:** We recommend that TSS Operations Division document a comprehensive policy and/or SOP to cover all aspects of its maintenance function, to include maintenance policies for vehicles, equipment, as well as small tools.

**MANAGEMENT RESPONSE:** Agree. TSS Operations will document functions, policies and procedures for the Equipment, Facility and Yard Operations (EFYO) Team.

**TARGET IMPLEMENTATION DATE:** The SOP manual for EFYO was initiated in September 2017. The work should be completed within a five months after the actual project start date, February 2018.

## **OVERDUE PREVENTIVE MAINTENANCE**

**STATEMENT OF CONDITION:** All COT departments are required to take their vehicles and some of their equipment to Fleet for preventive maintenance (PM) in a timely manner. TSS complies with this policy in the majority of cases. However, as shown in Table 1 below, some of the department's vehicles have gone overdue in their scheduled maintenance.

<b>Table 1: TSS Vehicles Overdue for Preventive Maintenance (March - August 2017)</b>		
<b>Date</b>	<b>Number of Vehicles Overdue</b>	<b>Percent of Vehicles Overdue</b>
8/7/2017	41	15%
7/24/2017	33	13%
7/11/2017	36	13%
6/26/2017	31	11%
6/12/2017	31	10%
5/30/2017	28	10%
5/15/2017	37	13%
5/3/2017	49	16%
4/16/2017	44	16%
4/3/2017	45	16%
3/20/2017	60	21%

**Source:** Auditor adaptation of the *Overdue Preventive Maintenance Report* provided by COT's Fleet Management Division.

**CRITERIA:** According to Fleet, by industry standards, a PM program is considered effective if no more than 10% of its vehicles are overdue in completing their preventive maintenance.

**CAUSE:** TSS operators sometimes prioritize their daily tasks ahead of preventive maintenance, causing them to hold vehicles that should be going to Fleet for scheduled PM work. There also appears to be a perception that maintenance may not be completed in a timely manner. However, late PMs can be the cause of extensive, more time consuming repairs.

**EFFECT OF CONDITION:** Fleet is unlikely to achieve its PM objectives when vehicles do not follow their maintenance schedules. Vehicles that invariably receive overdue PM usually develop more problems than might be anticipated. This not only causes prolonged downtime and a relatively costlier PM program, it also increases injury risk to operators and reduces vehicles' usable life expectancy.

**RECOMMENDATION 2:** TSS should establish an effective departmental strategy to ascertain that vehicles due for scheduled maintenance are turned in to Fleet in a timely manner. Also, TSS should work with Fleet to implement procedures that help minimize maintenance downtime.

**MANAGEMENT RESPONSE:** We agree with the audit recommendation that TSS should establish an effective departmental strategy to ensure that vehicles due for scheduled

maintenance are turned in to Fleet in a timely manner. And, that the department should work with Fleet to implement procedures that help minimize preventative maintenance downtimes.

TARGET IMPLEMENTATION DATE: Two senior team leaders are currently being established to assist in the management of the division's 177 staff members utilizing an inventory of 270 vehicles and equipment, which require regular preventative maintenance. One position was filled in October 2017 and the other will be posted in November 2017 and filled by January 2018. Enhanced enforce of timeliness of preventative maintenance will be in place by March 2018.

## **VEHICLE AND EQUIPMENT INSPECTIONS**

**STATEMENT OF CONDITION:** Fleet and the Division of Risk Management in Human Resources have established, and provide, ongoing support for a Vehicle and Equipment Inspection Program (VEI). Its purpose is to proactively identify problems with all City vehicles and equipment and to undertake prescribed repairs. By so doing, injury or work stoppage due to faulty equipment may be avoided, downtime may be reduced, and the useful life of COT's motorized assets may be extended.

The VEI entails two main activities namely, daily inspections of motorized assets before use as well as regular review of inspection reports by supervisors or management. All inspections are to be reported on standard forms and signed off by the operator. Supervisor review is demonstrated by management sign-off on the inspection forms. This did not appear to be the case based on a few inspection reports we reviewed.<sup>1</sup> We note however, that the policy on which the VEI guidelines or recommendations is based is still in draft form.

**CRITERIA:** In order to help better achieve VEI goals, management is required to undertake certain activities related to the program, including performing regular reviews of vehicle/equipment inspection reports.

**CAUSE:** According to TSS, on some days management performs unannounced inspections of all vehicles to evaluate performance with respect to the VEI. The impromptu nature of this activity motivates operators to try and always be compliant with inspection requirements. Emphasis on the yard inspections might contribute to management paying less attention to signing off on inspection records.

**EFFECT OF CONDITION:** Knowing that management does not often sign off on inspection records on the reports, some operators might not see the reason to continue producing them or to do the actual inspections themselves. This might result in the VEI failing to achieve its safety and preventive maintenance goals.

**RECOMMENDATION 3:** We recommend TSS Operations to consider the following:

- a) Work with Fleet as well as Risk Management Divisions to finalize the VEI policy.
- b) Fully enforce VEI Program requirements and implement measures to ascertain that supervisors sign off on all operators' inspection reports so that management review of vehicle and equipment inspections is demonstrable.

**MANAGEMENT RESPONSE:** Agreed.

- a) The VEI policy has been reviewed by TSS and implemented as a pilot project. TSS management agrees with the policy as written and adopted it as a standard operation procedure signed and approved by management.

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<sup>1</sup> Management provided us with six vehicle inspection reports and only two had supervisor signature.

- b) TSS will enforce the policy and require supervision to inspect and sign off on all operator reports. The responsibility of enforcement will be delegated to the Stormwater and Transportation Senior Team Leaders and shall be monitored and reported upon periodically to management and all Team Leaders by the Vehicle and Equipment Team Leader.

TARGET IMPLEMENTATION DATE: March 2018.

## **SEGREGATION OF DUTIES**

**STATEMENT OF CONDITION:** P-Cards are used by COT departments and divisions to acquire what they need for their daily operations. Authorized department or division employees are issued Visa cards which they use to purchase appropriate goods and services. As of July 2017, TSS Operations Division had 18 such employees, one of whom had the added responsibility to perform p-card reconciliation for the division.

Purchasing financial records show that between October 1, 2014, and August 4, 2017, TSS Operations used the p-card to purchase goods and services worth \$782,101. Of that amount, the division's p-card reconciler was responsible for transactions worth \$15,622, of which \$15,319 was for purchases made in FY 2017.

**CRITERIA:** According to accounting best practice standards, effective internal controls require segregation of duties in the review and/or reconciliation of financial records. The principle of separation of duties is helpful not only to help reduce the risk of inappropriate purchases, but also to mitigate against inadvertent errors employees might make in their purchasing or reconciliation functions.

**CAUSE:** While the division requires management to approve all purchases, COT has not adopted a citywide policy on segregation of duty controls in p-card purchase and reconciliation functions. As such, TSS Operations does not have a separation of duty policy either.

**EFFECT OF CONDITION:** Without segregation of incompatible functions, the TSS Operations Division is vulnerable to inappropriate and/or wasteful spending. Also, the p-card can be used to purchase goods and/or services that do not serve a clear business purpose.

**RECOMMENDATION 4:** Management should consider implementing the following recommendations:

- a) Segregate purchasing and reconciliation responsibilities by reassigning the p-card that the reconciler currently has to another employee.
- b) Document a separation of duties policy so that incompatible functions like purchasing and reconciliation are not assigned to one individual.

**MANAGEMENT RESPONSE:** The COT has not adopted a citywide policy on segregation of duty controls in p-card purchase and reconciliation functions. However, TSS Operations has begun a process that reduces or eliminates any issues, without a separation of duty policy. That process is as follows:

- Two other employees are currently being trained to be p-card reconcilers, and they will be issued p-cards.
- There will be a total of three reconcilers that will rotate the work on periodic random bases.
- The Customer Service, Administrative Support and Procurement (CAP) Supervisor, and

division manager, must sign a preapproval form for any requested p-card purchase (prior to the purchase) by any of the three reconcilers.

- The manager must sign off on all hard copy p-card receipts division wide prior to reconciliation.
- And finally, the manager must approve all p-card purchases division wide in Oracle.

The process mentioned above will greatly reduce or eliminate any possible conflict of interest regarding the reconciler's use of a p-card.

TARGET IMPLEMENTATION DATE: Corrective action has been initiated and training will be complete by February 2018 fully activating the new procedures.