MANAGEMENT AUDIT REPORT

OF

FLEET MAINTENANCE PROGRAM

ALBUQUERQUE FIRE DEPARTMENT

REPORT NO. 12-102

City of Albuquerque
Office of Internal Audit
Executive Summary

The Office of Internal Audit (OIA) conducted a management audit of the Albuquerque Fire Department’s (AFD) fleet maintenance program. The audit was included in the FY 2012 approved audit plan passed by the City Council under resolution R-11-214 and was also requested by AFD as a proactive approach to improve the program’s operations.

AFD’s fleet maintenance is a program within the Fire Logistics Division and separately maintained by the fire department. According to the City’s FY11 Comprehensive Annual Financial Report, AFD maintained a total of 29 rescue vehicles (ambulances), 57 fire engines and specialty units and 109 support units (car, truck and SUVs). Program expenditures averaged approximately $2.5 million for FY10 and FY11. Budget funding to support fleet maintenance activities is derived from the City’s general fund and State Fire Protection Fund (59A-53-5 NMSA 1978).

Objective: Does AFD fleet maintenance staff possess the technical knowledge and certifications that are needed to maintain the department’s diverse fleet?

- AFD fleet maintenance staff do not possess Emergency Vehicle Technician (EVT) certifications outlined by The National Fire Protection Association (NFPA).
- AFD’s current facility may not be able to support the diverse needs of the department. AFD’s facility is relatively small and underequipped when compared to similar cities.

Objective: Does AFD have effective processes and accurate records for fleet preventive maintenance and repairs?

- AFD has not created comprehensive preventive maintenance processes, record retention schedules or utilized the capabilities of the City’s fleet management software to address the needs of its diverse fleet. An insufficient preventive maintenance program may void factory warranties.
- AFD has not submitted a response for Goal 2: Priority Objective 4 for fiscal year 2009. The priority objective addresses the need and cost of the department’s preventive maintenance program.

Objective: Does AFD have effective internal controls to ensure outsourced fleet maintenance activities are in compliance with established contracts?

AFD has not created effective internal controls to ensure outsourced vehicle part and service charges are in compliance with established contracts or used specific sections within contracts that would allow for the reduction in vehicle part costs. Exceptions were noted for all vendors selected for detailed test work. OIA estimates that AFD has been overcharged for sales tax applications to labor service charges by approximately $17,000 from FY10 to March 1, 2012. The City could also save $6,800 per fiscal year if AFD does not pay sales tax in addition to labor rate charges. OIA also estimates recurring cost savings at approximately $12,000 per fiscal year by furnishing the parts needed for maintenance and repair services.

Management responses are included within the audit report.
June 27, 2012

Accountability in Government Oversight Committee
City of Albuquerque
Albuquerque, New Mexico

Audit: Management Audit
AFD – Fleet Maintenance
12-102

FINAL

INTRODUCTION

The Office of Internal Audit (OIA) conducted a management audit of the Albuquerque Fire Department’s (AFD) fleet maintenance program. The audit was included in the fiscal year (FY) 2012 approved audit plan passed by the City Council under resolution R-11-214 and was also requested by AFD as a proactive approach to improve the program’s operations.

AFD’s fleet maintenance is a program within the Fire Logistics Division. The purpose of the Logistics Division is to “Support AFD personnel by providing them with safe, well maintained vehicles, personal protective equipment, special operations equipment, emergency medical supplies, as well as a safe, healthy, comfortable working environment so that they are able to perform their tasks as effectively and safely as possible.”

AFD’s diverse fleet is separately maintained by the fire department. AFD fleet maintenance operations were transferred from the City of Albuquerque’s (City’s) fleet management division in FY2000. The fleet maintenance program consists of one fleet maintenance supervisor and three mechanic III positions. The fleet maintenance program performs maintenance activities in-house, commercially and in the field. According to the City’s FY11 Comprehensive Annual Financial Report, AFD maintained a total of 29 rescue vehicles (ambulances), 57 fire engines/specialty units and 109 support units (car, truck and SUVs).

National Fire Protection Association (NFPA) codes and standards are a major part of AFD’s regulatory environment. NFPA develops, publishes, and disseminates more than 300 consensus codes and standards intended to minimize the possibility and effects of fire and other risks.

The program’s general fund budget was $1.44 million, $1.42 million and $1.57 million for FY10, FY11 and FY12, respectively. However, actual expenditures averaged approximately $2.5 million for each FY10 and FY11. Budget funding to support fleet maintenance activities is
derived from the City’s general fund and State Fire Protection Fund (59A-53-5 NMSA 1978). Due to anemic economic circumstances in recent years, the City supplemented general fund revenue with State Fire Protection Fund revenue in order to maintain AFD fleet maintenance operations.

In an effort to identify common operational and compensation information, OIA surveyed 15 regional and comparable cities’ fire department fleet maintenance divisions, of which nine responded. The information derived from these surveys will provide the department with a greater understanding and valuable insight of other cities’ fire department fleet maintenance operations. Survey results are presented below and throughout the report.

**Fleet Maintenance Divisional Structure by City**

<table>
<thead>
<tr>
<th>City</th>
<th>Organization Orientation</th>
<th>Reason for Organizational Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In-House</td>
<td>Outsourced</td>
</tr>
<tr>
<td></td>
<td>X (non-major frontline maintenance and services)</td>
<td>X (rescue/support units and major repairs for fire engines) Ability to prioritize and provide quick service turnaround for frontline units to maintain emergency response capabilities. Lack of internal resources and facility limitations. Engine, transmission and suspension repairs for frontline vehicles are outsourced.</td>
</tr>
<tr>
<td>Albuquerque, NM</td>
<td>X (emergency only)</td>
<td>- Quality control and superior knowledge of in-house technicians. Support units are maintained by the City’s fleet division.</td>
</tr>
<tr>
<td>Tucson, AZ</td>
<td>X (most preventive maintenance and repair work)</td>
<td>X (transmission, body and tire work) Safety, cost control, ability to prioritize repairs and ability to refurbish and extend the service lives of apparatuses.</td>
</tr>
<tr>
<td>Colorado Springs, CO</td>
<td>X (primarily all services)</td>
<td>X (minimal) Quality and knowledge of in-house technicians, ability to prioritize and response availability (24/7/365). DFD has also experienced poor service for prior outsourcing attempts.</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>X (all)</td>
<td>- Speed, cost and quality.</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>X (all)</td>
<td>- Improved cost control and ability to greatly reduce down time.</td>
</tr>
<tr>
<td>Santa Fe, NM</td>
<td>X (all)</td>
<td>- Quality control.</td>
</tr>
<tr>
<td>Reno, NV</td>
<td>X (all)</td>
<td>- Quality control.</td>
</tr>
<tr>
<td>Oklahoma City, OK</td>
<td>X</td>
<td>X Cost effectiveness.</td>
</tr>
<tr>
<td>El Paso, TX</td>
<td>X (emergency vehicles)</td>
<td>X (support, warranty and overflow work) Experience, ability to prioritize repairs, cost control and lack of space and expertise by regular city fleet maintenance division.</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>X (primarily)</td>
<td>X (minimally) Workload and cost effectiveness.</td>
</tr>
</tbody>
</table>

Source: OIA surveys
### Internal Fleet Maintenance Structure, Salary and Certification Matrix

<table>
<thead>
<tr>
<th>City</th>
<th>Division Structure</th>
<th>Average Salary Information</th>
<th>Required/Recommended Certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oversight Technicians</td>
<td>Oversight Technicians</td>
<td></td>
</tr>
<tr>
<td>Albuquerque, NM</td>
<td>1 3</td>
<td>$47K $40K</td>
<td>Recommend – ASE and EVT</td>
</tr>
<tr>
<td>Tucson, AZ</td>
<td>5 12</td>
<td>- $41.6K</td>
<td>Require – ASE and EVT</td>
</tr>
<tr>
<td>Colorado Springs, CO</td>
<td>1 3</td>
<td>$65K $57K</td>
<td>Require – ASE and F series EVT Consider E series EVT</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>3 14</td>
<td>- $85K (after 5 years of service)</td>
<td>Require – ASE plus 5 years of experience; Recommend - EVT</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>3 9</td>
<td>$65K $40 to $60K</td>
<td>Require – ASE and EVT</td>
</tr>
<tr>
<td>Santa Fe, NM</td>
<td>1 3</td>
<td>- $48 to $58K</td>
<td>Require – ASE and EVT for administrator</td>
</tr>
<tr>
<td>Reno, NV</td>
<td>1 3*</td>
<td>$81K $73K</td>
<td>Recommend – ASE and EVT</td>
</tr>
<tr>
<td>Oklahoma City, OK</td>
<td>2 9</td>
<td>$46 to $70K $35 to $59K</td>
<td>Require – ASE and EVT</td>
</tr>
<tr>
<td>El Paso, TX</td>
<td>1 10</td>
<td>$45K $32 to $39K</td>
<td>Recommend – ASE and EVT</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>3 12</td>
<td>- $30 to $46K</td>
<td>Recommend – ASE and EVT</td>
</tr>
</tbody>
</table>

* The City of Reno notes that the division is significantly understaffed and has reduced its technical staff by three because of budget reductions.

### Budget and Fleet Maintenance Vehicle Details by City

<table>
<thead>
<tr>
<th>City</th>
<th>Budget</th>
<th>Emergency Vehicles</th>
<th>Support Vehicles</th>
<th>Other Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Engine/Specialty Apparatus Ambulance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albuquerque, NM</td>
<td>$1.57 M (General Fund Budget)</td>
<td>57 29</td>
<td>109</td>
<td>-</td>
</tr>
<tr>
<td>Tucson, AZ</td>
<td>$1.97 M</td>
<td>72 32</td>
<td>N/A</td>
<td>8 tenders</td>
</tr>
<tr>
<td>Colorado Springs, CO</td>
<td>$1.71 M</td>
<td>41 4</td>
<td>57</td>
<td>14 brush trucks and 1 tender</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>$743 K (Operating only. Salaries and benefits not included)</td>
<td>67 9</td>
<td>136</td>
<td>-</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>$2.0 M</td>
<td>62 51</td>
<td>85</td>
<td>-</td>
</tr>
<tr>
<td>Santa Fe, NM</td>
<td>$100 K (Operating only. Salaries and benefits not included)</td>
<td>15 15</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>Reno, NV</td>
<td>$225K (Operating only. Salaries and benefits not included)</td>
<td>60 5</td>
<td>75</td>
<td>26 brush, 11 patrol rigs, and 6 tenders</td>
</tr>
<tr>
<td>Oklahoma City, OK</td>
<td>$1.11 M (Operating only. Salaries and benefits not included)</td>
<td>112 -</td>
<td>113</td>
<td>-</td>
</tr>
<tr>
<td>El Paso, TX</td>
<td>$780K (Operating only. Salaries and benefits not included)</td>
<td>69 40</td>
<td>8</td>
<td>3 wild-land and 1 mobile air unit</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>$2.3 M (includes accident repairs)</td>
<td>98 5</td>
<td>105</td>
<td>10 boats</td>
</tr>
</tbody>
</table>

Source: OIA surveys
AUDIT OBJECTIVES

The objectives of the audit were to determine:

- Does AFD fleet maintenance staff possess the technical knowledge and certifications that are needed to maintain the department’s diverse fleet?
- Does AFD have effective processes and accurate records for fleet preventive maintenance and repairs?
- Does AFD have effective internal controls to ensure outsourced fleet maintenance activities are in compliance with established contracts?

SCOPE

Our audit did not include an examination of all functions and activities related to the fleet maintenance program. Our scope was limited to the above objectives for FYs 2010, 2011 and 2012.

This report and its conclusions are based on information taken from a sample of transactions and do not represent an examination of all related transactions and activities. The audit report is based on our examination of activities through the completion of fieldwork on March 21, 2012 and does not reflect events or accounting entries after that date.

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.

METHODOLOGY

OIA reviewed National Fire Protection Association (NFPA) standards and applicable State and City regulations relevant to AFD’s fleet maintenance operations. Key personnel were interviewed to gain a better understanding of internal and external operations and processes. OIA also surveyed 15 regional and comparable cities in an effort to identify common operational and compensation information from other fire department fleet maintenance divisions.

Test work was completed for high volume – high dollar vendors used by AFD’s fleet maintenance program to fulfill their vehicle maintenance and repair needs. OIA reviewed statistical and random samples of invoices to determine if service rates and financial related activities are in compliance with established contracts.
Audit sampling software was used to generate statistical and random attribute test data, when needed, to accomplish audit objectives. Population data was derived from AFD and City information systems when possible. Random and sequential samples were selected for documentation that was only available in hard copy format.

FINDINGS

The following findings concern areas that OIA believes could be improved by the implementation of the related recommendations.

1. **AFD SHOULD ENSURE FLEET MAINTENANCE STAFF POSSESS THE TECHNICAL KNOWLEDGE AND CERTIFICATIONS NEEDED TO MAINTAIN THE DEPARTMENT’S DIVERSE FLEET.**

   AFD fleet maintenance staff do not possess Emergency Vehicle Technician (EVT) certifications outlined by The National Fire Protection Association (NFPA). Shop mechanics do possess Automotive Service Excellence (ASE) certificates and have received factory Ford, GMC and Pierce training but such certifications are not interchangeable with EVT certifications. The fleet supervisor has two EVT certifications and one mechanic has one EVT certification. However, NFPA outlines multiple EVT certifications in conjunction with ASE heavy equipment certifications in order to obtain standard EVT technician levels.

   NFPA standard 1071 outlines the ideal technical knowledge and certifications needed for mechanics to demonstrate their ability for maintaining and repairing emergency vehicles. EVT certifications specifically relate to the specialized equipment for emergency fleet vehicles. NFPA outlines three EVT technician levels. At a minimum, an EVT I is required to possess general operating knowledge of emergency vehicle regulations and must obtain certifications for chassis, cab and body components, electrical systems, auxiliary drive devices and one specialty area from fire pump/auxiliary tank systems, aerial systems or specialized systems.

   However, EVT certifications are not a requirement within AFD’s mechanic job descriptions. AFD stated “The AFD has over the last four years made efforts to qualify our mechanics with ASE certifications and EVT certification in order to build our shop to meet the demands and needs of the department.” As demonstrated by the other municipality surveys within in the introduction, highly trained EVT mechanics are highly desirable for fire fleet maintenance divisions. As a result, compensation must be aligned with the skill level of such mechanics in order to retain quality staff.

   Insufficient technician knowledge may void factory emergency vehicle warranties. During a review of warranties, OIA noted that newly acquired rescue and fire engine vehicles warranties contain language that implies the technical knowledge of technicians. The rescue warranty states “Improper installation, repair or alterations” are exclusions to the factory warranty. Likewise, recently purchased engine warranties state “any malfunction resulting from misuse, negligence, alteration, accident or lack of operational knowledge or normal
“Maintenance or adjustments” are not covered by the factory warranty. However, AFD has never voided a warranty due to their workmanship.

RECOMMENDATIONS

AFD should:

- Strive to obtain applicable EVT technician levels for fleet mechanics outlined by NFPA 1071.
- Ensure that factory warranties will not be voided as a result of fleet maintenance technician knowledge or lack of certifications.

RESPONSE FROM AFD

“AFD encourages and support all current mechanics in becoming EVT certified. AFD will request to increase the mechanic’s classification from B32 to B35 to match their special mechanical designation necessities. The increase in classification may allow AFD to require all mechanics be hired with or obtain an EVT certification. The increased classification will make AFD more competitive in its ability to hire and retain highly certified mechanics.”

ESTIMATED COMPLETION DATE

“AFD will continue to support the further education of its work force. AFD’s mechanics are scheduled for continuous training and certification through our current vendors. AFD mechanics are tasked with continuous education opportunities to maintain high standards. The proposal for the increase in classification will be submitted by FY13 midyear markup.”

2. AFD SHOULD CREATE AND IMPLEMENT A COMPREHENSIVE PREVENTIVE MAINTENANCE PROGRAM AND RECORD RETENTION SCHEDULES.

AFD has not created comprehensive preventive maintenance processes or record retention schedules to address the needs of its diverse fleet. AFD’s standard operating guidelines (SOGs) only address the general needs for fire engine apparatuses. AFD also has policies and procedures for the replacement of frontline vehicles. However, both policies and procedures are outdated and do not fully incorporate NFPA standards. Both issues are explained in detail under the following subheadings (A and B).

AFD has not utilized the capabilities of the City’s fleet maintenance software. The City’s fleet maintenance software is fully capable of supporting the needs of the AFD’s fleet maintenance program. AFD’s fleet maintenance management stated that “The division has experienced the loss of knowledgeable staff while maintaining high workloads, which has made it challenging to keep up with data entry functions.”
An insufficient maintenance and repair program and lack of maintenance documentation may void factory warranties. Newly acquired rescue unit warranties state “Any part or parts becoming defective as a result of failure to provide normal routine maintenance” are excluded from the factory warranty. Likewise, recently purchased fire engine warranties state “any malfunction resulting from misuse, negligence, alteration, accident or lack of operational knowledge or normal maintenance or adjustments” are not covered by the factory warranty.

A.) Preventive Maintenance Policies and Procedures

The issues below were identified during the audit.

- General apparatus policies were updated in 2010. However, detailed Standard Operating Guidelines for fire apparatus inspection and maintenance were last updated in 2008 and frontline replacement schedules were last updated in 2007.
- AFD’s fleet includes many specialized vehicles that must be maintained according to factory warranty requirements in order to sustain optimal performance. As such, it is necessary to create maintenance schedules that are aligned with each vehicle’s warranty requirements. For example, aerial apparatus have very different maintenance needs than support units.
- AFD does not have written policies and procedures to address the maintenance and repair activities of their rescue and support vehicles. AFD solely relies on outsourced vendors to maintain rescue and support preventive maintenance schedules. Management stated that the vendor generally estimates and does not have a process to accurately track such information. For example, preventive maintenance schedules are based on rough estimates such as “they have not seen the vehicle in about 3 months or so.” The extent of a preventive maintenance process is a reminder sticker adhered to the vehicles windshield.

NFPA 1911, 1915 and 1901 standards outline comprehensive details for creating a preventive maintenance program for fire apparatuses. Likewise, City Administrative Instructions (AI) outline the requirements for a preventive maintenance program for support vehicles. AI 4-1 outlines the requirement for preventive maintenance and scheduling of vehicle repairs. AI 4-8 outlines how the City will identify which vehicles to repair and which must be removed from service.
B.) Record Retention Schedules

The issues below were identified during the audit.

- AFD does not maintain comprehensive daily emergency vehicle logs. AFD staff stated that emergency vehicle logs are supposed to be centrally filed at AFD’s administrative office. However, daily logs were not comprehensive and could not be located for the most recent months of December 2011, January 2012, or February 2012.
- AFD solely relies on outsourced vendors to maintain rescue and support vehicle records. AFD does not maintain internal documentation for the maintenance and repair activities for these vehicles.

New Mexico Administrative Code (NMAC) outlines the retention and disposition schedules for all New Mexico municipalities. NMAC 1.19.8.706 states that emergency equipment checklists such as daily inspections and vehicle readiness logs must be retained for one year after the close of the calendar year in which created. NMAC 1.19.8.902 states that vehicle maintenance files such as, maintenance/repair orders and maintenance schedules must be retained for three years after the close of the fiscal year in which created. In addition, NFPA standard 1911 states that all vehicle records should be kept for the life of the vehicle (fire apparatus) and delivered with the vehicle upon transfer or change of ownership.
The table below illustrates other city preventive maintenance control activities.

### Fleet Maintenance Control Activities

<table>
<thead>
<tr>
<th>City</th>
<th>Established Policies and Procedures for PM Activities</th>
<th>How are PM Activities Maintained</th>
<th>Maintenance of Apparatus and Specialized Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque, NM</td>
<td>Yes, but limited to engines/apparatus</td>
<td>Manual process but is converting to fleet maintenance software</td>
<td>Pump test are performed in-house. Aerial, ladder and hose tests are performed by a third party, annually.</td>
</tr>
<tr>
<td>Tucson, AZ</td>
<td>Yes</td>
<td>Fleet maintenance software with customized intervals</td>
<td>Pump and ladder tests are performed annually or when a major service is performed (engine or transmission).</td>
</tr>
<tr>
<td>Colorado Springs, CO</td>
<td>Yes, but limited to inspection and equipment care</td>
<td>Manual process for maintenance schedules. Actual PM activity is captured with fleet maintenance software.</td>
<td>Pump, aerial, hose and ladder tests are performed annually.</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>Yes</td>
<td>Fleet management software with customized intervals and notifications.</td>
<td>Pump and specialized equipment are annually maintained in-house. Aerial and ladders are tested by a third party.</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>Yes</td>
<td>Fleet management software.</td>
<td>Utilizing fleet software, all regular maintenance is scheduled on a rotating basis.</td>
</tr>
<tr>
<td>Santa Fe, NM</td>
<td>Yes</td>
<td>Both manual and computerized with the goal of fully computerized by year end.</td>
<td>Maintenance schedules are maintained by the fleet administrator.</td>
</tr>
<tr>
<td>Reno, NV</td>
<td>Yes, but limited</td>
<td>Fleet management software – currently being implemented</td>
<td>Fleet software will manage maintenance and testing schedules.</td>
</tr>
<tr>
<td>Oklahoma City, OK</td>
<td>Yes</td>
<td>Fleet maintenance software maintains and schedules.</td>
<td>Pump, ladder and aerial tests are performed by a third party.</td>
</tr>
<tr>
<td>El Paso, TX</td>
<td>No</td>
<td>Based on engine hours and tracked by software and windshield sticker reminders.</td>
<td>Aerial and ladder tests are performed by a third party. Pump and specialized equipment tests are performed in-house.</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>Yes</td>
<td>Fleet maintenance software maintains schedules.</td>
<td>All testing is maintained within the fleet maintenance system.</td>
</tr>
</tbody>
</table>

### RECOMMENDATIONS

AFD should:

- Utilize City software systems to create and implement a comprehensive preventive maintenance and repair program that ensures compliance with factory warranties, NFPA standards and City regulations.
- Create and implement documentation retention policies and procedures that are aligned with NFPA standards and State regulations for AFD vehicles, especially emergency vehicles.
- Create and maintain AFD’s Standard Operating Guidelines to include all vehicles maintained by the department.

Source: OIA surveys
RESPONSE FROM AFD

“AFD will update the current policies and procedures to create and implement a comprehensive preventative maintenance program and record retention schedule. The program and schedule will include all AFD emergency and support vehicles. AFD is currently working with the Fleet Focus trainer to update our Fleet Focus program and implement it at its full capacity. Fleet Focus is the City of Albuquerque’s central database for retaining comprehensive preventative maintenance and repair records to include scheduling and part inventory. AFD will request the creation of a permanent position to maintain the city’s Fleet Focus Inventory system which will be part of the invoice validation process. Without a position dedicated to the Fleet Focus program, AFD will not possess the internal experience or manpower to maintain Fleet Focus at the highest level. To meet its immediate needs, AFD will request temporary staff to maintain Fleet Focus.”

ESTIMATED COMPLETION DATE

“AFD will complete the updated policies by the end of the 2nd quarter FY13. The request for a position to maintain Fleet Focus and track outsourced vehicle activities will be submitted to the Administration by FY13 midyear makeup.”

3. AFD SHOULD CREATE AND IMPLEMENT COMPREHENSIVE POLICIES AND PROCEDURES FOR OUTSOURCED VEHICLE ACTIVITIES.

AFD has not created effective internal controls to ensure outsourced part and service charges are in compliance with established contracts. Invoices are not reviewed by fleet maintenance management to ensure that rendered service costs are reasonable and in compliance with established contracts. Invoices are received by AFD’s fiscal department and paid. Fiscal staff does not have the expertise to determine if performed work or part charges are reasonable. For example, fiscal staff would not know if the labor hours charged on an invoice are reasonable for the stated work performed.

Six, high volume — high dollar vendors used by AFD’s fleet maintenance program, were identified for test work purposes. OIA identified exceptions with all six vendors, which are identified by alpha notations A through F.
Below is a synopsis of the issues identified:

- Vendor A and D are charging tax in addition to the labor rates outlined within the contract. Contracts state that all quoted labor rates are tax inclusive. All invoices with service include this exception. OIA estimates the overcharge to be approximately $17,000 from FY10 to March 1, 2012. The City could also save $6,800 per fiscal year if AFD does not pay sales tax in addition to labor rate charges.

- Vendor A and C are not providing service hour details on invoices. Service rate charges for labor are listed as a single gross amount on invoices. The contract states that time rate charges should be individually fractionated flat hour labor rates for each service, which should be supported by industry flat rate manuals. Vendor A was unable to accurately regenerate supporting documentation for service time charges on 17 of 28 invoices.

- AFD purchased vehicle parts from vendors B, C, D and E that are not addressed within their respective contracts. The contracts do not outline part discount rates or profit margins, which leaves part prices to the sole discretion of the vendors.

- Vendors A, C, D and E contain multiple overcharges for parts. AFD did not receive the proper discounts outlined within the respective contracts.

- Vendors D and E could not locate supporting documentation for certain parts charged on invoices. The vendors stated that manufacturer and jobber rates are constantly changing and were unable to produce supporting documentation for the specific parts tested.

- All invoices for vendor B contain service rate exceptions that do not comply with the contract. OIA noted both under and over charges for associated service charges.

- Test work could not be performed for vendor F because the price lists outlined within the contract are no longer valid and have been destroyed. The vendor began utilizing software approximately four years ago in place of hard copy price lists. However, the software program only contains current pricing information and does not allow the vendor to recover historical pricing.

In addition, AFD is not utilizing specific sections within contracts that would allow for the reduction in vehicle part costs. Support vehicle part charges appeared to be high for common vehicle parts such as, brake pads, windshield wipers and brake rotors. The list price for these parts are highly inflated compared to the City’s ability to procure the same parts. City Auto On and Off Road request for bids state “The City reserves the right to furnish without cost to the contractor, any repair parts, accessories or supplies required in the repair of City-owned vehicles.”

As a result, the City can capture recurring cost savings by furnishing the parts needed for maintenance and repair services. The City also has a contract with the same parts vendors used by the vehicle service vendors and can purchase the same parts at a discount price that is equal or less than the vehicle service vendor’s price. OIA observed a 50 percent savings between the list price and City’s price. OIA estimates recurring cost savings at approximately $12,000 per fiscal year.
City AI 3-4 states;

“It is the responsibility of the receiving department to inspect work being performed on behalf of the City to ensure that it is being completed in accordance with contractual commitments. Inspections on projects or services which are performed periodically or which require extended periods of time prior to completion will be conducted a minimum of every thirty days, at the completion of each period of service not exceeding thirty days, or in accordance with an inspection schedule if such is a part of the contract or specifications.”

AI 3-4 also states that inspections of goods and services should be documented.

The City Code of Resolutions 3-1-3 states “It shall be the policy of city government to attempt continually to operate as efficiently as possible and that pursuant to this end on-going studies should be conducted to help achieve efficient and effective government functioning.”

RECOMMENDATIONS

AFD should:

- Create and implement comprehensive policies and procedures that ensure vendor part and service costs are reasonable and in compliance with established contracts.
- Ensure that all outsourced vehicle maintenance and repair invoices are reviewed and approved by AFD’s fleet maintenance supervisor to ensure reasonableness and contractual compliance before payment.
- Recover sales tax overcharges from vendors that are charging tax in addition to labor rates.
- Utilize contract clauses that allow AFD to capture recurring cost savings by furnishing vehicle parts needed for outsourced maintenance and repair services.

RESPONSE FROM AFD

“AFD will create and implement a comprehensive policy and procedure for outsourced vehicle activity. AFD will request the creation of a permanent position to assist AFD’s Fleet Maintenance Supervisor in reviewing all invoices for contractual compliance while maintaining Fleet Focus. This position will also track and verify cost savings, warranties, rebates and part furnished to outsourced vendors for maintenance and repairs. AFD will evaluate past invoices for potential cost recovery.”
ESTIMATED COMPLETION DATE

“AFD will create and implement a comprehensive policy and procedure for outsourced vehicle activity by the end of the 2nd quarter FY13. The request for a position to maintain Fleet Focus and track outsourced vehicle activities will be submitted to the Administration by FY13 midyear makeup.”

4. AFD SHOULD ENSURE THE FLEET MAINTENANCE FACILITY IS SUFFICIENT TO SUPPORT THE NEEDS OF THE DEPARTMENT’S DIVERSE FLEET.

AFD’s current facility may not be able to support the diverse needs of the department. AFD’s facility is relatively small and underequipped when compared to similar cities. The lack of space and equipment presents challenges and limitations for the fleet maintenance division. For example, large fire apparatuses must be inched into the facility because of space and height limitations. Below are photographs of AFD’s fleet maintenance facility in use.
As previously mentioned, AFD’s facility is relatively small compared to comparable cities’ fire fleet maintenance facilities. The table below illustrates facility specifications for other cities.

### Facility Specification Matrix

<table>
<thead>
<tr>
<th>City</th>
<th>Square Feet</th>
<th>Ceiling Height</th>
<th>Number of Bays</th>
<th>Other Info.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque, NM</td>
<td>5,306 (includes storage)</td>
<td>15ft</td>
<td>3</td>
<td>One portable lift and two service trucks.</td>
</tr>
<tr>
<td>Tucson, AZ</td>
<td>12,000 1,800 (open air)</td>
<td>25ft</td>
<td>12</td>
<td>Built in fall protection for 6 bays, 5 ton bridge crane and 3 ton exterior boom crane.</td>
</tr>
<tr>
<td>Colorado Springs, CO</td>
<td>15,296 (includes 4 offices)</td>
<td>36ft</td>
<td>8</td>
<td>Uses mobile repair truck to allow emergency vehicles to remain in service, if possible.</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>33,000 (includes shop offices, class room and specialty shops) 2,800 (storage)</td>
<td>25ft</td>
<td>15</td>
<td>In-house capability to perform full service and rebuilds. The shop includes welding and fabrication shops.</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>20,000 18ft – 20ft</td>
<td>5 (lifts)</td>
<td>-</td>
<td>Two sets of lifts, one for pumpers and the other for ambulance and support vehicles.</td>
</tr>
<tr>
<td>Santa Fe, NM</td>
<td>3,600 20ft</td>
<td>3</td>
<td>-</td>
<td>Two bays are equipped to lift four wheel units and a third to lift six wheel aerial apparatuses.</td>
</tr>
<tr>
<td>Reno, NV</td>
<td>20,000 (includes office space and part/equipment storage) 20ft</td>
<td>6</td>
<td>-</td>
<td>Four portable lifts.</td>
</tr>
<tr>
<td>Oklahoma City, OK</td>
<td>6,000 20ft</td>
<td>7</td>
<td>-</td>
<td>Two lifts and one oil pit for performing PM services.</td>
</tr>
<tr>
<td>El Paso, TX</td>
<td>18,600 (includes part and misc. storage rooms)</td>
<td>3 – low bays 6 – high bays</td>
<td>-</td>
<td>Two lifts and one oil pit for performing PM services.</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>11,000 30ft</td>
<td>12</td>
<td>-</td>
<td>Source: OIA surveys</td>
</tr>
</tbody>
</table>

**RECOMMENDATION**

- AFD should perform an analysis to determine if the current fleet maintenance facility is sufficient to meet the needs of the department’s diverse fleet.

**RESPONSE FROM AFD**

“AFD is exploring opportunities to build or buy a larger facility. Our current location is inadequate and has no potential for expansion. AFD’s mechanics maintain a high quality of work with their scope of work being limited by the Fleet Maintenance Facility. To maintain a safe working environment for all AFD personnel, AFD puts the maintenance of its emergency vehicles as one of its highest priorities. The acquisition of an adequate maintenance facility will allow AFD’s mechanics to work at their
full capacity reducing the outsourced cost and increasing oversight. The main objective of Fleet Maintenance is to maintain AFD’s fleet in superior condition to reduce the risk to the fire fighters during high hazard incidents.”

ESTIMATED COMPLETION DATE

“Due to the budgetary constraints AFD is unable to put a timeline on the completion this objective. The acquisition of a Fleet Maintenance Facility was included as part of our capital needs submitted in FY11 and FY13 but was not funded. It is part of AFD’s internal master plan.”

5. AFD SHOULD ENSURE THAT PRIORITY OBJECTIVE UPDATES ARE SUBMITTED ON TIME.

AFD has not submitted a response for Goal 2: Priority Objective 4 for fiscal year 2009. The priority objective addresses the need and cost of the department’s preventive maintenance program. Priority Objective 4 states that AFD should:

Develop a thorough in-house preventive maintenance program with timelines and maintenance schedules to increase the cost efficiency of maintaining the Department’s fleet and equipment. Compare long-term cost of in-house maintenance versus outsourced maintenance of Fire Department vehicles and equipment. Provide a copy of the preventive maintenance program and comparison report outlining potential cost savings, next steps to take, and funding required to implement the program to the Mayor and City Council by the end of the third quarter of FY/09.

Untimely and inaccurate information may lead to poor management decisions. The City’s Administration and City Council needs timely and accurate information in order to make sound management decisions.

AFD’s fleet maintenance management stated that “The division has experienced the loss of knowledgeable staff while maintaining high workloads, which has made it challenging to keep up with data entry functions.”

RECOMMENDATION

- AFD should ensure priority objectives are submitted by the due dates outlined within the City’s Approved Budget.
RESPONSE FROM AFD

“AFD has updated Priority Objective 4 for fiscal year 2009. AFD advised council that an audit was scheduled and upon completion of the audit AFD will submit a final report to council.”

ESTIMATED COMPLETION DATE

“AFD will send the City Council a full report by the end of the 2nd quarter FY13.”

CONCLUSION

We believe this audit will help identify controls needed to improve accountability, processes and fiscal integrity pertaining to the operational activities of the AFD Fleet Maintenance Program.

We appreciate the assistance and cooperation of the Albuquerque Fire Department personnel during the audit.
Principal Auditor

REVIEWED and APPROVED: 

________________________________________  APPROVED FOR PUBLICATION:

Carmen Kavelman, CPA, CGAP, CFE, CISA
Director, Office of Internal Audit

Chairperson, Accountability in Government Oversight Committee