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HIGHLIGHTS

Highlights of City Auditor Report #0612, a report to the City Commission and City management.

WHY THIS AUDIT WAS CONDUCTED

Fire protection, rescue, and emergency medical services are critical services provided by the City of Tallahassee to the citizens of the City and Leon County. In 2005, the Fire Department consisted of 249 certified professional firefighters working at 15 fire stations covering 671 square miles and serving over 250,000 citizens.

This audit focused on the acquisition, disposal, and accounting for and funding of fire vehicles, and the inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses. Audit procedures included interviewing key individuals, observing various testing procedures of hydrants, hoses, and ladders, analyzing financial information, surveying other municipalities, and examining relevant documentation.

WHAT WE FOUND

During our audit, we identified issues related to the acquisition and disposal of fire vehicles, the inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses, and the accounting for fire vehicles. Specifically:

- The life expectancy of fire vehicles could be extended;
- Vehicle leases with Volunteer Fire Departments (VFDs) were not consistently signed and insurance coverage was not verified;
- Annual vehicle maintenance payments to the VFDs were not accurate;
- The inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses was not consistently performed, reported, and/or documented to provide assurance they were working properly;
- Newly installed hydrants in the unincorporated areas were not consistently added to the GIS mapping data; and
- There is not an adequate accounting for the funding and replacement of vehicles acquired and used by the Fire Department. We estimated that over a 17-year period, the Fire Department received \$6 million more in vehicles than it contributed in vehicle replacement payments into the Fleet Reserve Fund.

To view the full report, go to: <http://www.talgov.com/auditing/index.cfm> and select *Auditing Reports*, then *Reports Issued FY 2006*, then *Report #0612*. For more information, contact us by e-mail at auditors@talgov.com or by telephone at 850/891-8397.

Audit Conducted by: Beth Breier, CPA, CISA

April 25, 2006

AUDIT OF

Fire Operations

WHAT WE RECOMMEND

During our audit, we noted areas where there was compliance with City policies and procedures, as well as areas where improvements were needed. Our recommendations included:

- Review and consider extending the average life expectancy established for City fire response vehicles.
- Implement a process to ensure that all leased vehicles have properly executed agreements and adequate insurance.
- Pay the VFDs the accurate amount for vehicle maintenance as required by the mutual aid agreement.
- Develop written agreements between appropriate departments documenting each department's responsibilities related to improving the frequency, consistency, and quality of: a) hydrant testing and reporting of deficiencies; b) hydrant maintenance and reporting of completed repairs; and c) notification of newly installed hydrants in the unincorporated areas.
- Develop and implement a method of uniquely identifying each fire hydrant.
- Ensure there is an adequate process in place to track portable ladders and hoses from acquisition to disposal to verify testing and condition.
- Update the apparatus checklists and improve the oversight of inspections and completion of the apparatus checklists.
- Clarify the Fleet Management Policy regarding the policy's intent in funding vehicle replacements.
- Implement a methodology to account for departments' contributions into and expenditures from the Fleet Reserve Fund.

We would like to thank and acknowledge the full and complete cooperation and support of the Fire Department, Fleet Management Division, Department of Management and Administration, City Water Utility, Information Systems Services, Treasurer-Clerk, and Talquin Electric Cooperative, Inc.

FIRE OPERATIONS

AUDIT REPORT #0612

April 25, 2006



Copies of this audit report #0612 may be obtained from the City Auditor's web site (<http://talgov.com/auditing/index.cfm>), by telephone (850 / 891-8397), by FAX (850 / 891-0912), by mail or in person (City Auditor, 300 S. Adams Street, Mail Box A-22, Tallahassee, FL 32301-1731), or by e-mail (auditors@talgov.com).

Audit conducted by:

Beth Breier, CPA, CISA, Audit Manager

Sam M. McCall, CPA, CGFM, CIA, CGAP, City Auditor

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Fire Operations



Sam M. McCall, CPA, CGFM, CIA, CGAP
City Auditor

Report #0612

April 25, 2006

Executive Summary

We reviewed selected fire operations to include accounting for and management of critical fire suppression apparatus, such as vehicles, hydrants, ladders, and hoses.

There are areas where improvements should be made.

This audit reviewed selected fire operations to determine whether: 1) the acquisition and disposal of fire vehicles were in accordance with City policies and procedures; 2) the inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses were in accordance with Fire Department and City policies and procedures and industry standards; and 3) the methodology utilized by Department of Management and Administration (DMA) provides an adequate accounting for the funding and replacement of vehicles acquired and used by the Fire Department.

City fire services activities are accounted for in an enterprise fund. Enterprise funds are used to report activity for which fees are charged to external users for goods or services provided. For this type of fund, fees and charges should be established to recover all costs, including capital costs such as depreciation and debt service.

We identified several issues that should be addressed by City management. Issues related to the acquisition and disposal of fire vehicles included:

- The average life expectancy established for City fire response vehicles could be extended.
- Fire vehicle lease agreements between the Fire Department and volunteer fire departments were not signed by all parties and retained.
- Efforts were not made to ensure that the volunteer fire departments had adequately insured the leased fire vehicles.

- The Fire Department underpaid the volunteer fire departments for agreed upon annual vehicle maintenance.

We noted issues in the identifying, testing, and repairing of fire hydrants, ladders, and hoses. Independently, these areas would generally not cause great concern. However, when considered collectively, these operational issues impact the manner in which the Fire Department provides fire protection services to citizens of Leon County as follows:

Individual issues related to fire hydrants, ladders, and hoses when considered collectively could negatively impact public safety related to fire rescue services.

- There was not a written agreement between the Fire Department and water utilities (City Water Utility and Talquin Electric Cooperative, Inc.) to document responsibilities related to the frequency and manner that hydrants are to be inspected, repaired, and maintained.
- Specific safety-related issues included:
 - Fire hydrant testing was not adequately documented to provide assurance that all hydrants were tested according to standard operating procedures.
 - Fire hydrants were not regularly tested to ensure they had an adequate water flow.
 - Defective hydrants were not consistently reported in a timely manner to be repaired or when repaired.
 - Newly installed hydrants in the unincorporated areas were not added to the public safety Geographic Information System in a timely manner.

- Fire hydrants were not uniquely marked so they could be accurately identified during inspections, testing, repairs, or use.
- Portable ladders (used on fire vehicles) were not uniquely marked so they could be accurately identified during inspections, testing, repairs, and inventories.
- There are not adequate records related to the acquisition, testing, and disposition of fire hoses to ensure that all hoses retained for use have been properly tested and are in good working condition.
- Apparatus checklists were not updated and inspections were not monitored to document that fire trucks had the appropriate equipment in the proper location.

For many of the above issues, the Fire Department, Water Utility, and other City departments have already begun to work together to develop resolutions.

There is not an adequate accounting for the funding and replacement of vehicles acquired and used by the Fire Department.

Lastly, when reviewing the method of accounting for and funding of fire vehicles, we determined that over a 17-year period, the Fire Department received \$6 million more in vehicles than it contributed in vehicle replacement payments into the Fleet Reserve Fund. Upon inquiry as to why this had occurred, DMA indicated that they did not maintain an accounting by department of beginning balances, contributions into, and expenditures from the Fleet Reserve Fund to show actual costs associated with each department's operations during each period. Absent such records, we believe there is a lack of accountability to the Fire Department, as well as to other City departments.

The Office of the City Auditor intends to conduct a more thorough review of the Fleet Reserve Fund and the impacts to all City departments.

Because of the complexity of the current accounting process, and differences of opinion between DMA and the Office of the City Auditor as to the adequacy of the accounting for vehicles, we intend to conduct a more thorough review of the Fleet Reserve Fund and the impacts to all City departments, rather than just the impact to the Fire Department. Based upon the results of that review, we will issue a separate report should significant differences of opinion continue to exist.

We would like to thank and acknowledge the full and complete cooperation and support of the Fire Department, Fleet Management Division, Department of Management and Administration, City Water Utility, Information Systems Services, Treasurer-Clerk, and Talquin Electric Cooperative, Inc.

Fire Operations



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Report #0612

April 25, 2006

Scope and Objectives

This audit focused on acquisition, disposal, and accounting for and funding of fire vehicles, and inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses.

The scope of this audit included a review of selected fire operations to include the accounting for and management of critical fire suppression apparatus such as fire response vehicles, hydrants, ladders, and hoses. Our review included selected periods from 1987 through 2004.

Our audit objectives were to determine whether:

- 1) The acquisition and disposal of fire vehicles were in accordance with City policies and procedures;
- 2) The inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses were in accordance with Fire Department and City policies and procedures and industry standards; and
- 3) The methodology utilized provides an adequate accounting for the funding and replacement of vehicles acquired and used by the Fire Department.

Methodology

To address the stated objectives, we observed and gained an understanding of the various departments' operations and responsibilities.

To address the first objective related to the acquisition and disposal of fire vehicles, we:

Audit procedures were performed to obtain an understanding of how critical fire suppression apparatus is accounted for, tested, and maintained.

- ❖ Interviewed City staff from the Fire Department, Fleet Management Division, Department of Management and Administration's (DMA) Budget and Accounting Services Divisions, and staff from the volunteer fire departments.
- ❖ Reviewed relevant documentation, including City policies and procedures, Fire Department standard operating procedures, consultant reports, and Insurance Services Office (a private organization that provides data, analytics, and statistical information to help insurance companies evaluate and classify risk) rating criteria and reports.
- ❖ Analyzed financial data (obtained from various reports and the City's accounting system), vehicle acquisition data (obtained from procurement source data and Fleet FASTER system), and vehicle disposal information (obtained from DMA's Municipal Supply Center).
- ❖ Surveyed other municipal fire departments regarding the length of time they utilized fire vehicles before disposal.

To address the second objective related to the inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses, we:

- ❖ Interviewed key staff in the Fire Department, Water Utility, Talquin Electric Cooperative, Inc., State Fire Marshal's Office, Insurance Services Office, and vendor offices.
- ❖ Reviewed relevant documentation, including City policies and procedures, Florida Statutes and Administrative Code, City/County contracts, consultant reports, Insurance Services Office reports, and industry guidelines and best practices.

- ❖ Observed tests conducted by firefighters of selected fire hydrants.
- ❖ Observed tests conducted by contractors of selected ladders.
- ❖ Observed selected daily inspections of fire vehicles, as well as tools and equipment on fire vehicles, at City fire stations.
- ❖ Tested hydrant location accuracy and completeness within the public safety Geographic Information System.

To address the third objective related to accounting for the funding and replacement of fire vehicles, we:

- ❖ Interviewed City staff from the Fire Department, Fleet Management Division, and DMA's Budget and Accounting Services Divisions.
- ❖ Analyzed financial data (obtained from various reports and systems) and vehicle data (obtained from the City's Asset Management System and Fleet FASTER system).
- ❖ Reviewed and analyzed reports evaluating the adequacy of the Fleet Reserve Fund balance prepared by DMA.
- ❖ Reviewed relevant documentation, including City policies and procedures, consultant reports, and governmental generally accepted accounting principles.
- ❖ Calculated, with the assistance of City staff, estimates of Fire Department contributions into and benefits received from the Fleet Reserve Fund for fire vehicles.

This audit was conducted in accordance with Generally Accepted Government Auditing Standards and Standards for the Professional Practice of Internal Auditing.

Background

Since the first organized City Fire Department in 1930, the Fire Department has expanded fire protection services to residents both in the City and in Leon County's unincorporated areas.

Fire services activities are accounted for as an enterprise fund.

General Information

In the earlier years of Tallahassee's history, fires were fought using citizen bucket brigades. The first mention of organized fire fighting in Leon County was in the 1860's, when a City resolution gave authority for the first volunteer fire chief in 1868. In 1930, the first paid fire department was organized with six full-time paid staff and a budget of \$19,000. Over the years, the department has grown and increased services to not only the citizens of Tallahassee but also to citizens located in unincorporated Leon County.

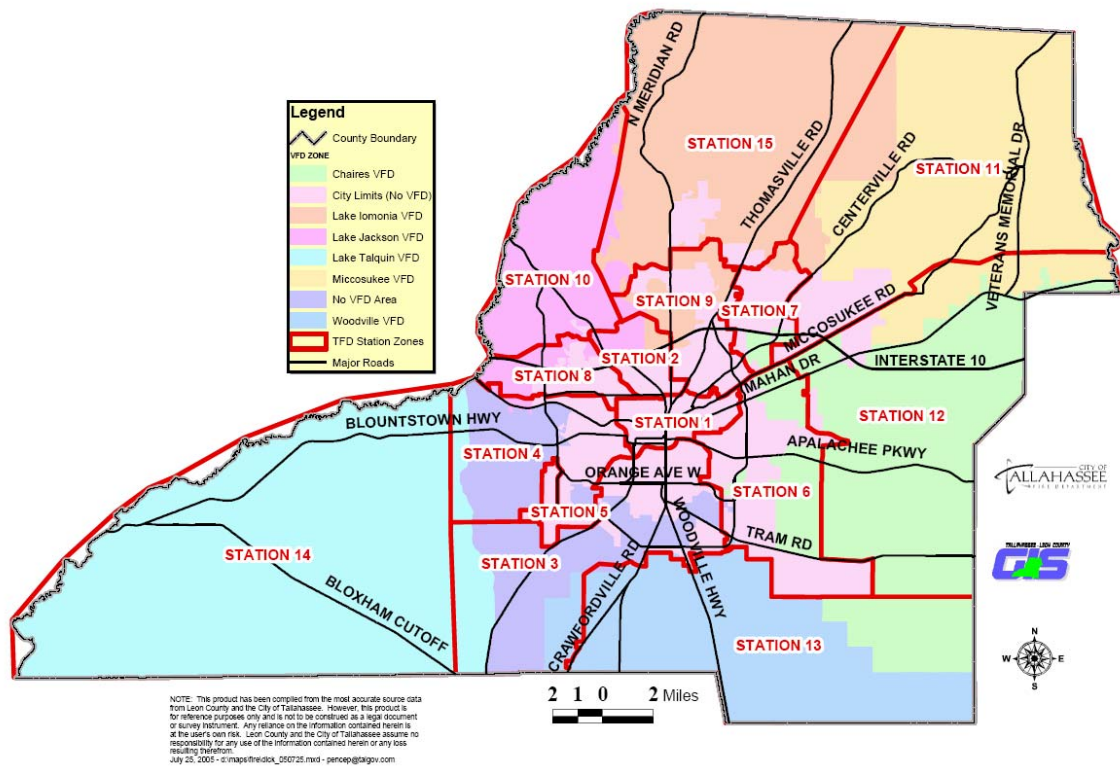
Today, the City of Tallahassee Fire Department provides professional fire protection and rescue services from 15 stations and emergency medical services from five stations. These stations are located throughout Tallahassee and unincorporated Leon County. The response area covers 671 square miles and serves a population of approximately 260,000. Figure 1 on the next page shows the locations of the fire stations.

City fire services activities are accounted for in an enterprise fund. Enterprise funds are used to report activity for which fees are charged to external users for goods or services provided. For this type of fund, fees and charges should be established to recover all costs, including capital costs such as depreciation and debt service.

The Fire Department employs 249 certified professional firefighters and operators at 15 fire stations; and 46 certified volunteer firefighters working out of six volunteer fire departments.

In fiscal year 2004, the Fire Department employed 265 full-time personnel, 249 of which are certified professional firefighters. These firefighters include operators, lieutenants, captains, and division chiefs. In addition, there are 46 certified volunteer firefighters working out of six volunteer fire departments (VFD) located in strategic response areas in unincorporated Leon County. Figure 1 below shows the location of the City’s fire stations.

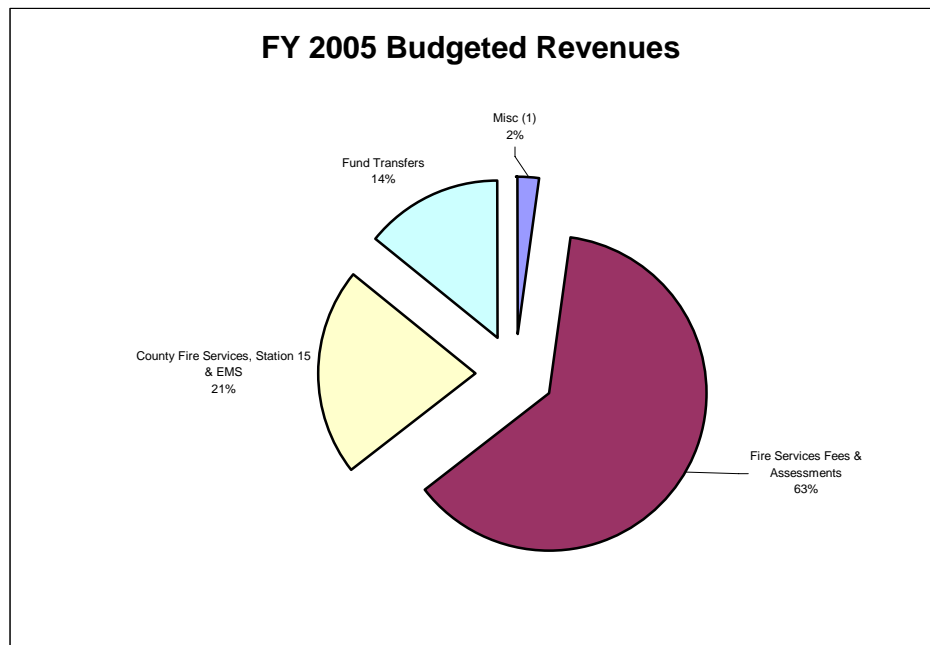
**Figure 1
Fire Department Station Response Areas**



The Fire Department is primarily funded through fire services fees and assessments paid by residents, businesses, state and federal government, and Leon County. Other revenue sources used to fund the Fire Department include transfers from other City funds, payments from Leon County for Emergency Medical Services and a

percentage of operating costs for Station 15 (co-supported by City and County), and miscellaneous revenues collected from environmental permits, forfeited discounts, false alarm fees, and fire inspection fees. Figure 2 shows the sources of revenues for fiscal year 2005.

Figure 2
Source of Revenues for Fiscal Year 2005



84% of the Fire Department revenues come from fire services fees and assessments, and County payments for fire services, Station 15, and EMS-contracted services.

Note: (1) Miscellaneous includes environmental permits, forfeited discounts, false alarm fees, and fire inspection fees.

Table 1 on the next page shows reported revenues and expenditures for fiscal years 2002 through 2005. In addition, it shows the number of budgeted full-time equivalent (FTE) positions.

Table 1
Fire Department Revenue and Expenses for Fiscal Years 2002 through 2005

Revenue and Funding Sources	FY 2002 Actual	FY 2003 Actual	FY 2004 Actual	FY 2005 Budget
Fire Services Fees & Assessments (residential, business, industry, and federal & state government)	\$ 13,968,107	\$ 14,231,232	\$ 14,714,263	\$ 14,709,950
County Fire Services, Station 15 & EMS	\$ 3,256,275	\$ 3,281,810	\$ 3,895,592	\$ 5,043,208
Miscellaneous Sources (1)	\$ 372,921	\$ 449,642	\$ 434,794	\$ 493,045
Transfers from Other Funds (2)	\$ 632,006	\$ 2,953,726	\$ 2,756,570	\$ 3,342,240
Total Revenues	\$ 18,229,309	\$ 20,916,410	\$ 21,801,219	\$ 23,588,443
Expenses				
Salaries (including temp, overtime) and Other Personnel Costs	\$ 12,346,509	\$ 15,123,746	\$ 15,771,864	\$ 17,457,797
Operating Expenses (3)	\$ 2,275,492	\$ 1,743,770	\$ 1,450,068	\$ 2,151,876
Allocated Costs	\$ 3,262,570	\$ 4,047,665	\$ 4,494,144	\$ 3,978,770
Total Expenses	\$ 17,884,571	\$ 20,915,181	\$ 21,716,076	\$ 23,588,443
Budgeted FTEs	261	262	263	265

Notes: (1) Includes environmental permits, forfeited discounts, false alarms, and interest.

(2) Includes annual transfers from the airport fund for all years, and transfers in years 2003-2005 from other funds including the deficiencies fund, fire construction fund, fire services operating reserve fund, or health care reserve fund.

(3) Includes utilities, transfers to debt service and RR&I funds, capital outlay, and other services, charges, and adjustments (such as: environmental permits, forfeited discounts, and false alarms).

Source: City Financial Reports and HRMS system

Fire Rescue Funding Program

The City Fire Department provides fire services to all areas in Leon County. “In 1999, the City adopted a Fire Rescue Funding Program to design an alternate revenue program capable of efficiently and effectively collecting all assessable and billable costs associated with providing fire services on an annual basis.”¹ This funding program is a vehicle to secure recovery of the cost to provide fire rescue services to privately owned properties (residential, business, and industry) and governmental properties (county, state, and federal). Funds are collected from two key types of revenues: 1) a fire fee for governmental property and 2) a fire

¹ City of Tallahassee Fire Services Funding Program Report, February 2005

assessment for private sector properties. Both funding mechanisms (the fire fee and fire assessment) are typically referred to as charges. As shown in Figure 2 and Table 1, the majority of funds (84%) is acquired from fire services fees and assessments from residents, businesses, industry, and governments (state, federal, and county). Fourteen percent is acquired from annual transfers from the airport fund for all years, and transfers in years 2003-2005 from other funds including the deficiencies fund, fire construction fund, fire services operating reserve fund, or health care reserve fund.

In 2004, the City re-examined the adequacy of the Fire Funding Program rates and classifications to ensure that the revenues would cover 100% of the fire services costs.

In 2004, the City hired a consultant to re-examine the adequacy of the fire services charges to fund 100% of the identified assessable and billable costs projected over the next five years through fiscal year 2009. During his examination, the consultant considered the following types of information:

1. Recipients of fire services – including:
 - a. Category of property (government, business, residential);
 - b. Type of dwelling or property (single or multi-family) and business size (i.e., square footage); and
 - c. Historical number and type of calls for service for fiscal years 2001, 2002, and 2003.
2. Costs of fire services. Prior year applicable costs were used to develop a five-year projected budget. (Program costs related to plans review and airport functions were excluded due to different funding mechanisms.)

Fire Services Agreement with Leon County

The City and Leon County have had a fire services agreement in place since 1983 that provides the basis for the payments made to the City for fire protection services (including Station 15). The

current agreement is due to expire on June 30, 2009. There is a separate agreement for the provision of Emergency Medical Services.

In 1983, the City and Leon County entered into a five-year agreement where Leon County would pay the City for fire protection in the unincorporated areas of Leon County based on a formula that considered population, ad valorem tax valuation, actual number of fire incidents, and the Fire Department's average response time to unincorporated locations.

In 1988, the City and Leon County entered into a revised and more comprehensive 20-year agreement for fire protection and prevention services. Subsequently, in May 2004, this agreement was revised whereas: 1) Leon County agreed to pay an additional \$1 million annually beginning in fiscal year 2006, and 2) the agreement was extended by an additional six months to June 30, 2009.

Provisions of the fire services agreement relevant to this audit include:

The fire services agreement dictates that the City and the Leon County will make efforts toward bettering their ISO ratings and lowering fire insurance costs.

- The City and Leon County will make efforts to ensure better Insurance Services Office ratings for the purpose of lowering fire insurance costs throughout the unincorporated areas (this is explained further beginning on page 16).
- The City will retain ownership of all fire services related capital assets including land, buildings, and equipment.
- Fire hydrants in the City water system located in unincorporated areas will be kept in good working order by the responsible parties (i.e., City Water Utility and Talquin). Expectations are that these hydrants will be used to fill fire vehicles (tankers) so water can be shuttled to fires.

Eleven VFDs are leasing fire vehicles from the City at a rate of \$1.00/year.

The City performs an annual maintenance inspection for each leased vehicle and also pays each VFD \$2,000 for each owned or leased vehicle (up to five) for annual maintenance costs.

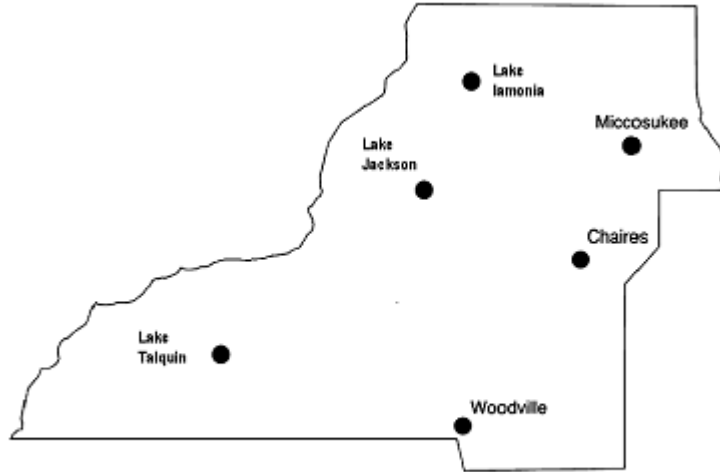
- The City and Leon County will make good faith efforts to establish mutual aid agreements with a minimum of six VFDs and to provide a variety of services to these VFDs. Specific items relevant to this audit include provision of management and organizational assistance and extension of the City's vehicle maintenance program to volunteer apparatus.
- Prior to disposal (determined by the City based on the vehicle condition and use), the City will lease available fire vehicles to VFDs for \$1 per year. The lease agreements should require that the volunteer fire department maintain liability insurance and physical damage insurance for the actual cash value of the vehicle and equipment leased.
- The City will not perform the vehicle maintenance for those City fire vehicles leased to the VFDs. Instead, it will pay the VFDs \$2,000 (annually increased by the consumer price index) for each volunteer fire vehicle leased or owned (up to five) for annual repairs and maintenance.
- The City's Fleet Management Division will conduct an annual maintenance inspection of the leased fire vehicles.

Volunteer Fire Departments (VFDs)

There are seven VFDs that have entered into separate mutual aid agreements with the City. Six VFDs entered into agreements with the City in December 1988, including: 1) Chaires-Capitola; 2) Lake Jackson; 3) Lake Talquin; 4) Miccosukee Land Co-op; 5) Miccosukee; and 6) Woodville. The remaining VFD, Lake Iamonia, entered into agreement with the City in August 1994. The Miccosukee Land Co-op VFD dissolved, and the area they covered

is now covered by the Miccosukee VFD. The locations of the VFDs are shown in Figure 3.

**Figure 3
Volunteer Fire Department Locations in Leon County**



Responsibilities related to the VFDs and the City Fire Department are dictated through the Fire Services Agreement and related amendments, and policy clarification letters; volunteer mutual aid agreements; and vehicle lease agreements.

Per the agreements, the City Fire Department chief is ultimately in charge and responsible for all fire-related emergency responses in Leon County.

These various agreements are in effect for the same term as the Fire Services Agreement and describe responsibilities for each party regarding the response areas, organization of the VFDs, dispatching of calls, chain of command, communications, apparatus maintenance and insurance, training, and space allocation at City fire stations. While there is a fire chief for each VFD and one City fire chief, the prevailing Fire Services Agreement stipulates that the City fire chief is ultimately in charge and responsible for all fire-related emergency responses.

Insurance Services Office (ISO)

The ISO is a private organization that evaluates the ability of fire departments on their response capabilities to fire emergencies by providing data, analytics, and statistical information to help insurance companies evaluate and classify risk.

As noted above in the description of the Fire Services Agreement with Leon County, the City and Leon County both committed to make efforts to obtain better ISO ratings and lower fire insurance costs throughout the unincorporated area. Some insurance companies include the ISO rating as a factor in determining insurance rates for dwellings and businesses.

The ISO conducts their evaluation of the City and Leon County approximately every three years.

The ISO conducts on-site reviews of fire departments or private infrastructure to evaluate buildings and building codes, vehicles and equipment, alarm response, hydrant condition and water supply, training, and staffing. Other considerations in their evaluations include service area population, coverage area, and density (i.e., square miles, population per square mile). Reviews are conducted approximately every three years, and the ISO communicates to the City and Leon County the fire response ratings for locations inside the City and outside the City. The ratings are on a 1 – 10 scale, with 1 being the highest (best) score and 10 being the lowest score.

The last ISO evaluation of the City Fire Department was conducted in 2002. The ISO ratings were 3/9 for the locations inside the City and 5/9 for the unincorporated areas. Separate scores are given for areas where buildings and structures are all within 1,000 feet of a fire hydrant or five miles of a fire station. The first digit in the rating score (3 and 5 respectively) is for service areas where there are entities within 1,000 feet of a fire hydrant or within 5 miles of a

fire station. The second digit of 9 in the rating score is for services that are outside these parameters.

Fire Suppression Equipment

Fire departments draw on a variety of resources to provide fire protection services, including:

- Employees - firefighters and administrative support staff.
- Buildings – fire stations, training facility, and storage.
- Vehicles –ladder, pumper, tanker, and brush trucks.
- Fire hydrants.
- Equipment – including, but not limited to, hoses, ladders, hydrant wrenches, “jaws of life” tools, chain saws, ropes, portable breathing apparatus, flashlights, and radios.

The City Fire Department has developed standard operating procedures to ensure that all critical equipment is available and in good working condition.

The Fire Department has developed standard operating procedures (SOPs) to provide guidelines for testing fire hydrants, hoses, and ladders, as well as the minimum training requirements for firefighters. In addition, there are inspection procedures for vehicles and equipment that firefighters perform at prescribed intervals (i.e., at each shift change, once a week, quarterly, yearly). All of these procedures are safeguards to ensure that staff and equipment are “ready” to respond to fire emergencies.

Fire vehicles, as well as all other City vehicles (with the exception of StarMetro buses and vehicles), are managed and maintained by the City’s Fleet Management Division. All City vehicles are accounted for as assets of the Fleet Management Division within the City’s financial statements. Similarly, related depreciation is recorded as an expense of the Fleet Management Division. The Fleet Management Division is also responsible for managing the Fleet Reserve Fund, which is used to procure replacement vehicles for all City vehicles including the Fire Department. Currently, the

Fire Department has a total of 96 vehicles costing approximately \$17 million, consisting of 49 fire trucks (ladder, pumper, and brush), 28 automobiles and pickup trucks, 14 trailers, and 5 boats.

Issues and Recommendations

During our audit, we noted areas where there was compliance with City policies and procedures, as well as areas where improvements were needed. These areas are explained below as: 1) the acquisition and disposal of fire vehicles; 2) the inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses; and 3) the accounting for and funding of vehicles.

Acquisition and Disposal of Fire Vehicles

Areas for improvement relate to vehicle life expectancy, insurance coverage of leased vehicles, and payments to VFDs for vehicle maintenance.

During our audit, we noted areas for improvement related to the acquisition and disposition of fire vehicles. These areas related to fire response vehicle life expectancy, recording disposition method of fire vehicles, insurance coverage of leased fire vehicles, and payments to VFDs for vehicle maintenance.

The City's established life expectancy (average of 11.9 years) for fire response vehicles should be reviewed to determine if the fire vehicles could be retained longer.

The City's expected life of fire vehicles could be longer than the current average of 11.9 years.

We conducted an informal survey of 25 municipal fire departments to find out how long they typically keep fire trucks. The 22 municipal fire departments that responded keep their fire trucks an average of 16.1 years, with the minimum being 8 years, and the maximum being 25 years. In comparison, the average expected life of City Fire Department fire trucks is 11.9 years, with a minimum of 10 years and a maximum of 20 years. The differences in life expectancy could be due to many unknown factors, such as square miles and geography of the area served, usage (i.e., high or low),

and functionality of the vehicles (i.e., ladder, pumper, brush, or tanker trucks).

For the majority of the City’s fire trucks, the estimated life is 10 years. Table 4 below shows the average estimated life of 50 City fire response vehicles (not including automobiles and pickup trucks) is 11.9 years.

Table 4
Expected Life of City Fire Response Vehicles
as of September 2004

Number of Fire Trucks	Estimated Life (in years)
41	10
1	14
1	15
7	20
Total	Average
50	11.9

Source: FASTER system

We identified 59 fire vehicles that were disposed of during fiscal years 1996 through 2004. We reviewed the disposition method for each. Table 5 shows the disposition method for the 59 vehicles during the nine-year period.

Table 5
Method of Disposition of Vehicles in Fiscal Years 1996-2004

Disposition Method	Number of Vehicles	Original Cost	Amount Recaptured from Sale	Salvage Rate of Return
Donated	3	\$ 27,596	\$ -	0%
Leased	11	\$ 669,369	\$ -	0%
Sold	45	\$ 2,568,926	\$ 351,369	13.7%
Totals	59	\$ 3,265,891	\$ 351,369	10.8%

Source: FASTER System and DMA Municipal Supply Center

By only considering those vehicles sold, the salvage rate the City received was 13.7%. The City’s estimated salvage rate used in calculations for vehicle replacement rate is 10%. Since the City is earning a better salvage rate than expected, it could be indicative that the vehicle’s useful life could be extended. If vehicles that are

properly operated and maintained can be owned for a longer period, the overall cost of ownership could be decreased.

It may be possible to extend the life of fire response vehicles and decrease the overall cost of ownership.

Fire Department and Fleet management indicated that they determined the expected life of the vehicles based on their past experience related to vehicle maintenance costs and knowledge of expected use for each vehicle type. However, due to better recordkeeping in the Fleet Management Division, there are better maintenance records for each vehicle. Based on the availability of better information related, both Fire and Fleet management acknowledged that it may be possible and more cost-effective to further review the extension of the City's life expectancy for fire vehicles.

We recommend that Fire and Fleet management work together to review the expected life of fire response vehicles to determine whether it would be more cost efficient and effective to extend the useful vehicle life prior to disposal.

Fire vehicle lease agreements between the Fire Department and volunteer fire departments were not signed by all parties and retained.

As described in the background section of this report, the mutual aid agreement between the City and the VFDs allows for the VFD to lease surplus fire vehicles from the City for \$1.00 per year. Fire management indicated that they executed annual lease agreements for each leased vehicle.

During our review of the lease documentation, we noted that lease agreements were not consistently completed and/or signed by the VFD and City representatives. Appendix B shows that for the 11

vehicle leases in 2004, five leases were not signed, and six agreements did not include the start and end dates for the lease period.

Vehicle lease agreements with the VFDs should be consistently completed, executed, and retained.

Properly executed and documented lease agreements reduce the likelihood of confusion regarding the responsibilities of each party. We recommend that the Fire Department work with the VFDs to properly execute and document lease agreements for all vehicles leased to VFDs.

Efforts were not made to ensure that the volunteer fire departments had adequately insured the leased fire vehicles.

The mutual aid agreements with the VFDs provide that VFDs are responsible for obtaining liability insurance and physical damage insurance for leased vehicles. In addition, the City should be named as the beneficiary. Proof of such insurance must be provided to the City. The physical damage insurance should be acquired for the actual cash value of the leased vehicle and equipment. To assist the VFDs, the City's Fleet Management Division is to annually inspect the leased vehicles and provide the VFDs with the cash value. The VFDs are to use the cash value to obtain an adequate level of insurance.

VFDs need to be advised of the cash value of their leased vehicles in a timely manner so they can obtain the appropriate level of insurance.

We noted that Fleet provided the cash value for all 11 vehicles leased to VFDs between one and three months after the date the insurance coverage started. After being provided the cash value information by Fleet, the VFDs did not adjust the insurance coverage to reflect the different cash value.

We also determined that Fleet had not developed a methodology to consistently establish cash values for leased vehicles. Under these

circumstances, there is a risk that leased vehicles are not insured at the appropriate levels.

We compared the most recent cash values established by Fleet to the insurance coverage obtained by the VFDs and noted that the overall cash value of the leased vehicles was \$343,000, while the overall insurance coverage for the leased vehicles was \$316,500 (approximately 8% lower than the cash value). One vehicle was insured for \$43,000 less than the cash value determined by Fleet. We noted that no one from the City reviewed the insurance obtained by the VFDs to determine its adequacy.

In the event that a leased vehicle is damaged or destroyed and has not been adequately insured, the City will incur a loss (i.e., the difference between the insurance proceeds and the vehicle's repair cost). To ensure that leased vehicles are adequately insured by VFDs, we recommend that the Fire Department, along with Fleet Management and Risk Management:

1. Establish a methodology (based on industry standards) that can be consistently applied to establish the cash value of the leased vehicles and equipment;
2. Provide the cash value information to the VFDs prior to their annual insurance renewal deadlines; and
3. Review the insurance documents to ensure that the VFDs obtain the adequate types and level of insurance.

The Fire Department underpaid the VFDs for agreed upon annual vehicle maintenance.

Amendment Number 1 to the Fire Services Agreement between the City and Leon County (dated November 13, 1991), states that

The City had not been applying the consumer price index in a cumulative manner when calculating the amount owed to the VFDs for vehicle maintenance.

The City will provide a payment of \$2,000 for each vehicle belonging to or leased by a volunteer department which has not been accepted into the City Fleet Management program for maintenance. The total payment shall be rendered to the volunteer department on January 1 of each year...The City will provide an annual increase of this amount based on the increase in the previous years' consumer price index.

Accordingly, to adjust for inflation, the \$2,000 should have been increased on a cumulative basis since 1991. However, each year the Fire Department management increased the \$2,000 maintenance payment only by the prior year's consumer price index. As a result, adjustments were not cumulative and did not keep up with the inflation rate as intended by the Fire Services Agreement.

Table 6 shows for fiscal years 2002 through 2004, the amount that should have been paid to VFDs, the actual amount paid, and the resulting estimated underpayment. Based on this table, the City Fire Department underpaid VFDs approximately 33% over the three-year period for vehicle maintenance.

**Table 6
Vehicle Maintenance Payments and Calculated Amount
Allowed Using the Consumer Price Index – All Urban
Consumers**

Fiscal Year	Number of Vehicles	Amount Allowed Per Vehicle	Total Amount Allowed	Total Amount Paid	Estimated Amount Underpaid
2002	20	\$ 2,642	\$ 52,834	\$ 40,680	\$ 12,154
2003	15	\$ 2,702	\$ 40,529	\$ 30,480	\$ 10,049
2004	24	\$ 2,774	\$ 66,573	\$ 49,536	\$ 17,037
Totals			\$ 159,935	\$ 120,696	\$ 39,239
Percentage					33%

Source: Calculations based on the consumer price index starting from 1991, obtained from the U.S. Labor Department of Labor Bureau of Labor Statistics, and payment information from the City accounting system.

The VFDs were underpaid approximately 33% for vehicle maintenance during fiscal years 2002 – 2004.

Fire Department management indicated that the VFDs have not questioned the amount paid for vehicle maintenance. Fire management also acknowledged that the amount provided to the VFDs was not in accordance with the agreement and future payments should be determined by applying the consumer price index on a cumulative basis.

We recommend that the City Fire Department comply with the Fire Services Agreement and calculate the amount to pay to the VFDs for vehicle maintenance by applying the consumer price index in a cumulative manner. In addition, we recommend that the City Fire Department conduct a review to examine the VFDs’ actual maintenance costs and determine if the maintenance payment amount should be revised in the mutual aid agreement.

Prior to the release of the report, Fire management met with the VFDs to discuss the vehicle maintenance payments for 2006. Fire is planning on increasing the payments based on the consumer price index according to the agreement. In addition, they will be making the maintenance payments contingent upon executed lease

agreements, leased vehicle inspections, and evidence of adequate insurance.

Inspection, Testing, Repairing, and Accounting for Fire Hydrants, Ladders, and Hoses

There are areas that can be improved relating to the inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses.

During our audit, we noted areas where improvements could be made in relation to the inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses. Independently, these areas would generally not cause great concern. However, when considered collectively, these areas, unless improvements are made, could negatively impact the manner in which the Fire Department provides fire protection services to the citizens of Leon County.

Areas where improvements can be made are related to: 1) developing written agreements between the Water Utility and Fire Department and the Fire Department and Talquin; 2) ensuring that fire hydrants and ladders are uniquely marked so they can be accurately identified during inspections, testing, repairs, and inventories; 3) developing a record-keeping process for the acquisition, testing, and disposition of hoses; and 4) updating apparatus checklists and improving the oversight of inspections to document that the fire trucks have the appropriate equipment in the proper location.

There is not a written agreement between the Fire Department and water utilities (City Water Utility and Talquin Electric Cooperative, Inc.) to document responsibilities related to the frequency and manner that hydrants are to be inspected, repaired and maintained, and location records updated.

As described in the Background Section, the City and County have a Fire Services Agreement that requires the City to follow ISO standards. Specifically, the agreement states:

A written agreement should be developed and implemented to document the responsibilities of each department related to inspections, repairs and maintenance, and notification of new hydrant locations.

The City and County jointly will take such action as is necessary to perform the requirements of the ISO Grading Schedule for Municipal Fire Protection with the Fire Suppression Rating Schedule including the Public Protection Survey Information For Areas Without Water Mains. Inspection and condition of hydrants should be in accordance with American Water Works Association (AWWA) Manual M-17, Installation, Maintenance, and Field Testing of Fire Hydrants.

The AWWA Manual M-17 states that, “the water utility, unless expressly relieved of its responsibility by the Fire Department in accordance with a written agreement, public ordinance, or other ownership, should schedule regular and sufficiently frequent inspections of hydrants to ensure they are in good working condition.” The City Water Utility relies on the Fire Department to conduct hydrant testing. However, there is no written agreement or other formal understanding regarding who is responsible for various hydrant testing and inspection activities.

During our audit, we noted the following issues indicative of the need for an agreement between the Fire Department and Water Utility:

- The testing of fire hydrants should be better documented to provide assurance that hydrants are tested according to standard operating procedures.

The Fire Department should improve the testing of fire hydrants by ensuring that all fire hydrants are tested according to standard operating procedures.

During our audit, we noted that the hydrants were not being consistently tested according to the Fire Department’s SOP #934, “Annual Hydrant Testing & Maintenance.” These

procedures require that: 1) each hydrant be tested in the same manner; 2) test results be documented; and 3) all mechanical problems be reported to the Fire Department Special Operations Division. The firefighters are provided a list of all hydrants within their particular service area for them to inspect, complete checklists, and report problems.

We reviewed hydrant inspection checklists and documentation collected from the 15 fire stations for activity conducted during fall 2004. Of the 15 inspection checklists, we noted that there were five that did not show the date or initials that each hydrant was inspected and was operating properly. Hydrants on checklists from four other stations were not consistently dated or initialed. In addition, interviews with firefighters from three different fire stations revealed that the inspection steps outlined in SOP #934 were not consistently followed. Without completed checklists, there is inadequate assurance that hydrants are tested and working properly.

- Hydrants should be tested regularly to ensure they have an adequate water flow.

Firefighters are not testing the adequacy of water flow during the annual testing of fire hydrants.

The AWWA Manual M-17 states that “hydrant owners have a moral obligation to see that adequate water flow can be delivered from every hydrant under their jurisdiction. If adequate flow cannot be delivered by a particular hydrant, then that hydrant is not fulfilling the primary purpose.”

Once a year, firefighters are provided a list extracted from the public safety Geographic Information System (GIS) of hydrants in their respective response areas to test. The tests

performed are dictated by Fire Department Standard Operating Procedure #934 “Annual Hydrant Testing & Maintenance.” These tests include checking to determine the hydrant:

- Has caps that can be opened and closed securely;
- Flows clear water (flow water until clear); and
- Can withstand static pressure (measuring the water flow pressure after water is flowing from the hydrant).

We noted during our interviews of firefighters that the SOP test step to check the static pressure was not always conducted during hydrant testing. This step takes longer and some stations only conduct this test on individual hydrants when requested. Without regularly verifying that there is adequate flow of water through the hydrants, it is possible that a hydrant may not have the expected water flow when needed to respond to a fire.

- There is not an adequate process in place to ensure that defective hydrants identified during testing are properly and timely repaired and returned to proper working condition.

Communication should be improved between the Fire Department and the water utilities to ensure that all defective hydrants are timely reported and repaired.

The fire hydrant testing procedures instruct the fire stations to report all deficiencies to the Fire Special Operations Division for compilation. In addition, hydrant problems may be reported throughout the year to the water utility as discovered by various sources including citizens, as well as firefighters. While the SOP directs the firefighters to report all deficiencies to the Fire Special Operations Division, it does not direct the deficiencies to be reported to the responsible water utility.

We noted that during the October 2004 hydrant testing conducted by the Fire Department, firefighters identified 77 deficiencies on their documentation. We determined, that as of August 2005, 75 of these deficiencies had not been reported to the respective water utility for repair. Five fire hydrants were in the unincorporated areas maintained by Talquin Electric Cooperative, Inc. (Talquin) and 72 were in the City. Examples of the identified deficiencies included:

- Broken or stuck part (making opening hydrant difficult);
- Hydrant water pressure too low; and
- Hydrants too low to the ground to operate wrench to open.

During the ten-month period between October 2004 and August 2005, some of these hydrants had been repaired, but 19 still had some level of deficiency that affected water flow (i.e., 17 hydrants had broken parts or no water pressure and two were too low to the ground to operate hydrant wrench). After the respective water utilities were notified, they addressed and repaired the defective hydrants.

We also noted that the water utilities were not notifying the Fire Department when the hydrants had been repaired. Without a process in place to notify the water utility when a hydrant needs to be repaired, it is possible that a defective hydrant will not function properly when needed. On the other hand, if the Fire Department is not notified when a reported hydrant has been repaired, they might not use the closest hydrant when responding to a fire if they believe it is still inoperable.

Newly installed fire hydrants in the unincorporated areas should be reported to the public safety GIS coordinator so they can be added to the database. This will ensure the hydrants are known to the firefighters for fire responses and are tested annually.

- There is no process in place to ensure that the public safety GIS is being updated when there are new fire hydrants added in unincorporated areas.

Department of Environmental Protection Rule 62-555 (Section 350) requires suppliers of water to maintain an up-to-date map showing the location of valves and fire hydrants. To test whether hydrants were properly included in the public safety GIS, we worked with the Planning Department to identify newly developed neighborhoods and developments throughout the fire services area. The identified new areas selected for review are shown in Table 7.

**Table 7
New Neighborhoods and/or Developments
Included in Testing**

Geographic Area	Neighborhood or Development
Northeast	Golden Eagle (County), Bull Run, Ox Bottom Manor
Southwest	Airport Commerce Center, Highway 20 duplexes, Tallahassee Community College Economic and Workforce Development Building
Middle	Florida State University Medical School, Reece Park Drive, Renaissance Center Building
Northwest	Home Depot, Tower Oaks subdivision (County), Foxwood subdivision
Southeast	Blairstone Road/Park shopping center, Southwood

We made site visits, observed hydrants, and then determined whether selected hydrants were in the public safety GIS.

For developments and neighborhoods located within the City limit, the observed hydrants were properly reflected in the public safety GIS. However, the hydrants observed in the unincorporated areas (identified as “County” in the above table) were not. Based on the results from our testing, we had further discussion with Talquin, the Fire Department, and the Water Utility. We learned that there

was not a process in place to update the GIS when new hydrants were added in areas maintained by Talquin. The last update provided to the City from Talquin was in 2002.

Written agreements should be developed between 1) the Fire Department and the City Water Utility and 2) the Fire Department and Talquin.

Because of the necessity for good water sources to fight fires, a process is needed to locate, test, and maintain all fire hydrants in Leon County. We recommend that the Water Utility work with the Fire Department to develop a written agreement documenting each department's responsibilities related to improving the frequency, consistency, and quality of: a) hydrant testing and reporting of deficiencies; and b) hydrant maintenance and reporting of completed repairs.

We also recommend that the City work with the County to ensure that the proper contracts and agreements have adequate wording to require that Talquin communicate with the Fire Department, specifically to address who is responsible for a) notifying the Fire Department of newly installed hydrants in the unincorporated areas; b) testing hydrants and reporting deficiencies; and c) maintaining hydrants and informing the Fire Department of completed repairs.

Fire hydrants were not uniquely marked so that they could be accurately identified during inspections, testing, and repairs.

The ISO and AWWA require that each hydrant be tested. To facilitate the Fire Department's annual testing of the fire hydrants, a listing of all fire hydrants is extracted from the public safety GIS. Each fire station receives a listing of all the fire hydrants located within their response area. The listing provides a description of where the hydrant is located. The description can be as precise as a specific address, or as vague as a street name, depending upon

whether there is an addressed property near the hydrant or whether the hydrant is located on an uninhabited street.

In the public safety GIS, fire hydrants are assigned a unique identification number. However, the identifying numbers are not physically placed on the fire hydrants. We noted that during the Fire Department's testing process, firefighters were adding hydrants at the end of the listing because the firefighters were not able to identify the hydrant they tested by the description on the listing.

Uniquely identifying fire hydrants will provide a way to ensure that all hydrants are accounted for, included in testing, and accurately identified for repairs and maintenance.

Without a method in which to determine that the public safety GIS includes all hydrants and that each hydrant can be identified, there is not assurance that each hydrant has been identified to be tested and working properly. We recommend that the Water Utility work with the Fire Department to develop and implement a method of uniquely identifying each fire hydrant.

The Fire Department should improve their record-keeping related to the testing and disposition of fire hoses.

Fire SOP #935, "Annual Hose Testing and Rotation" establishes guidelines for testing and rotation of hoses. Each hose that does not pass the testing should be removed from the truck for repair or disposal. The SOP also requires that the hose identification number and the length of the hose be marked on the record and the hose tagged to indicate the nature of the defect. The results of the annual hose testing are to be submitted to the Special Operations Division.

Fire hoses should be tracked through their life, from acquisition through testing to disposal.

During the audit, we observed selected fire stations test and rotate hoses. We noted that the hose inspection process was complicated by the lack of a process to manage the hose inventory. Hoses are not assigned to trucks or stations. Instead, they are rotated in and out of service in order to keep the hoses in working condition. In

addition, hoses may arrive at a fire incident on one truck and may be loaded afterward onto a different truck. The Fire Department is not concerned with what specific hose is on each truck, only that the proper length and size of hose is on the truck.

When the hoses are tested at each station, the results are written onto a standard form and submitted to the Special Operations Division. These handwritten forms are retained, but there is not a process in place to keep an on-going record of a hose's test results, status, and ultimate disposition. Defective hoses are tagged, stored together, and periodically discarded. The testing results only include the hose that was tested on that particular date. There is not a record maintained of hoses that are disposed of.

Without a standardized way to track the life of a hose, from acquisition through testing to disposition, it is very difficult to determine that all the hose deemed acceptable for use has been adequately tested and is in good working condition.

We recommend that the Fire Department review the inventory, testing, and disposition process and documentation to determine if there is a better way to ensure that the hoses retained for use have been properly tested and are in good working condition.

Portable ladders (used on fire vehicles) were not uniquely marked so they can be accurately identified during inspections, testing, repairs, and inventories.

Uniquely identifying ladders will provide a way to ensure that all are accounted for, included in testing, and accurately identified for use, repairs, or disposal.

The Fire Department does not have a standard operating procedure to address ladder testing. We observed a vendor conduct annual testing of the ladders on the trucks. Each ladder that did not pass the testing (and receive certification) was to be removed from the truck for repair or disposal. We noted that while some ladders were

marked as belonging on a specific vehicle, all ladders were not marked in such a way as to be uniquely identified. Without a consistently applied method to uniquely identify each ladder, it was not possible for management to demonstrate that the ladders had been tested, which ladders were in good working condition, and which ladders were in need of repair or replacement.

We recommend that the Fire Department implement a standardized process to demonstrate that all ladders are properly marked and included in inventory, properly tested, and are in good working condition.

Apparatus checklists were not updated and inspections were not monitored to document that fire trucks have appropriate equipment in the proper location.

Accurate apparatus checklists help the Fire Department ensure that each fire vehicle has the needed equipment and tools in easy-to-find locations to assist firefighters when responding to fire emergencies.

Fire suppression apparatus are the equipment and tools on fire trucks that are utilized by firefighters when providing fire protection services. The Fire Department has standardized what equipment and tools are to be stored in which location on each type of truck. This standardization of equipment and tools assists firefighters in knowing where to find what they need at a fire scene, no matter what station they are assigned to. Fire SOP #803, "Apparatus Checklists," requires daily and weekly inspections to be performed to ensure that the equipment and tools are properly located and are in good working condition for each shift.

We conducted testing on nine vehicles to ensure that all the equipment and tools listed on the apparatus checklist were located in their designated places. We noted that some items missing were determined by the Fire Department to be no longer needed. We also found some items that were not on the list that were determined by

the Fire Department to now be needed. Most of the missing or added items were considered minor. However, one reserve vehicle was missing 56 items. Fire management indicated that the items were most likely removed from this reserve vehicle and placed on the front line vehicles. However, management also indicated that it is their intent to keep reserve trucks in a ready state for when they are needed to temporarily replace a truck that is being repaired. Therefore, the equipment on these vehicles should be the same as the equipment on active vehicles currently in use, and should be accounted for accordingly.

We also noted that the inspection checklists were not consistently completed or initialed as being reviewed by the station lieutenants or battalion captains as required in SOP #803.

In order to ensure that each fire truck has the necessary equipment in the proper locations for firefighters to provide the most efficient and effective fire protection services, we recommend that management: 1) update the apparatus checklists accordingly; and 2) improve the oversight of inspections and completion of the apparatus checklists.

Accounting for the Funding and Replacement of Vehicles

Based on our review of the method of accounting for and funding of fire vehicles, we estimated that the Fire Department received \$6 million more in vehicles than it paid into the Fleet Reserve Fund.

During our audit, we reviewed the methodology used for the funding and replacement of vehicles acquired and used by the Fire Department. While the method of accounting for and funding of City vehicle acquisitions/replacements is the responsibility of DMA and not the Fire Department, we are including this issue within this report because it significantly impacts the funding of vehicles used by the Fire Department.

Over a 17-year period, the Fire Department received \$6 million more in vehicles than it contributed in vehicle replacement payments into the Fleet Reserve Fund. Based on our examination, there was not a satisfactory explanation why this occurred, as DMA does not maintain an accounting by department of beginning balances, contributions into, and expenditures from the Fleet Reserve Fund.

The Fire Department, as an enterprise activity, should be able to demonstrate accountability to its customers for rates charged, revenues received, and expenses incurred.

The Fire Department is recognized for accounting purposes as an enterprise fund meaning that it operates like a commercial business by providing services and charging a fee to customers for services provided. One significant difference from commercial businesses is that the Fire Department is the only provider of fire service; customers do not have the option of choosing another provider. As a government enterprise activity, the fire department should be able to demonstrate to its customers that rates charged are fair and that there is accountability for revenues received and expenses incurred.

During our audit, we examined amounts contributed into and disbursed from the Fleet Reserve Fund to acquire fire vehicles (including annual vehicle replacement payments, proceeds from sales, interest earnings, and purchases of replacement vehicles) for fiscal years 1987 through 2004. Some records were not available and conservative estimates (agreed upon by Budget and Accounting Services staff) were used in our analysis. Over this period, we estimated that the Fire Department contributed \$6 million less to the Fleet Reserve Fund than the value of vehicles purchased for the Fire Department. Table 8, on the next page, shows the results of our analysis (a more detailed schedule is shown in Appendix C).

**Table 8
Fleet Reserve Fund
Analysis of Fire-Related Contributions and Benefits Received for
Fiscal Years 1987 Through 2004**

Activity	Dollars
Fire Vehicle Replacement Annual Contributions to the Fleet Reserve Fund (1)	\$ 10,562,738
Proceeds from Sales of Fire Vehicles (2)	\$ 336,869
Estimated Interest Earned on the Fire Department's Balance in the Fleet Reserve Fund (3)	\$ 520,996
Total Fire Contributions to Fleet Reserve Fund	\$ 11,920,604
Benefits Received (Fire Vehicle Acquisitions) from Fleet Reserve Fund (1) (2)	\$ (18,019,753)
Excess amount received from the Fleet Reserve Fund (over the amount contributed)	\$ (6,099,149)

Data Sources: (1) City financial reports and systems
 (2) Fleet vehicle records and DMA Municipal Supply Center (responsible for the sales of surplus equipment and vehicles)
 (3) Treasurer-Clerk's Office

DMA's position is that amounts paid into the Fleet Reserve Fund, regardless of the paying department, can be used to purchase vehicles for any City department.

The above analysis did not and could not take into consideration amounts in the Fleet Reserve Fund that could have been attributed to Fire Department prior to 1987, as DMA has not maintain such records by department. Rather, DMA has taken the position that amounts paid into the Fleet Reserve Fund, regardless of the paying department, belong to the City as a whole at the time of receipt and can be used to purchase vehicles for any City department. Consequently, there is no direct relationship between amounts paid in a given period by individual departments with vehicles purchased for those respective departments. As we discuss later, we believe this does not provide an adequate accounting of the Fleet Reserve Fund and affects DMA's ability to demonstrate accountability and stewardship to Fire Department customers.

The current City practice of accounting for vehicles is different than the majority of county and municipal governments we contacted. Twenty-two (22) of the 24 governments we contacted recorded their vehicles and related depreciation expense within the individual enterprise funds that use the vehicles. In contrast, at the City of

Tallahassee, all vehicles and related depreciation expense are recorded within the Garage Fund (an internal service fund). Departments recognize the vehicle use cost by paying a monthly charge referred to as a vehicle replacement rate.

City Commission Policy #124, "Fleet Management," provides guidance regarding how the Fleet Reserve Fund is to be funded to purchase replacement vehicles for City departments. This policy states that:

The Fleet Management Policy provides the formula for vehicle replacement rates to accrue funds for the timely replacement of City vehicles.

The Vehicle Replacement Rate is a charge to the department for each assigned vehicle for the purpose of accruing funds in the Fleet Reserve Fund account for the timely replacement of City vehicles. Vehicle Replacement Rate formula shall be based upon the vehicle's estimated replacement cost less its estimated salvage value prorated over its predetermined useful life, adjusted by a factor to insure the adequacy of the Fleet Reserve Fund. [Section 124.04, J]

The policy also states that:

The Director of Department of Management and Administration shall set the monthly vehicle replacement rates to ensure adequate balances in the Fleet Reserve Fund. [Section 124.05, C.3]

Prior to 1998, DMA interpreted that the intent of this policy was to charge the vehicle replacement rates in order to fully fund (100%) the cost to replace City vehicles. Over the years, the Fleet Reserve Fund grew to approximately \$29 million. Between 1997 and 1999, monies from this fund were approved to procure items other than replacement vehicles, including:

- Additional (i.e., new) vehicles for Fire (\$817,000) and Electric (\$800,000);
- Fleet shop renovations (\$1.7 million);
- Satellite fuel facility (\$1.1 million); and

- Vehicle wash facility (\$525,000).

DMA has conducted reviews of projected replacement needs and the Fleet Reserve balance to determine departments' vehicle replacement rates.

In 1998, DMA conducted a review of the projected vehicle replacement needs and Fleet Reserve Fund balance and began to increase (5% annually) the departments' vehicle replacement rates to start to rebuild the fund balance. Sometime after 1998, DMA changed the goal of how monies were to be collected in the Fleet Reserve Fund to be only "enough cash to purchase replacement vehicles for only the next 1-2 years." (We refer to this as a "pay-as-you-go" method.) This was a major shift in funding policy. Each year during the budget process, DMA forecasts the vehicle replacement needs over the next five years and adjusts the vehicle replacement rates to provide a balance needed to purchase vehicles for the next 1-2 years. The desired balance will increase or decrease based on the projected needs. For the next few years, DMA has determined the desired balance to be between \$6-10 million.

DMA's goal is to maintain a balance in the Fleet Reserve Fund to meet the projected 1-2 year vehicle replacement needs.

At the end of FY 2005, the Fleet Reserve Fund balance was \$21 million. This was still higher than the desired goal of \$6-10 million. Therefore, to decrease the balance, DMA cut all departments' vehicle replacement rates by at least 50% in FY 2006. For example, in FY 2005, the Fire Department vehicle replacement rate was \$996,000, and in FY 2006, it is \$379,000 (62% decrease). DMA has indicated that they will continue to keep the vehicle replacement rates low until the fund balance meets their projected 1-2 year vehicle replacement needs.

Since 1998, DMA believes that each department has paid equitable amounts into the Fleet Reserve Fund; however, records have not been maintained to demonstrate such asserted accountability. A way to validate their belief would be with a schedule or accounting of each department's contributions into and disbursements (for

vehicle acquisitions) from the Fleet Reserve Fund. However, DMA has stated, “No such schedule or tabulation has been considered necessary to prepare.”

DMA believes that each department has paid equitably into the Fleet Reserve Fund, but they have not maintained adequate accounting records to support this.

Without an accounting of departments’ contributions and expenditures, DMA cannot demonstrate that each department has contributed its fair share into the Fleet Reserve Fund and received the appropriate amount of replacement vehicles for what it has contributed. For enterprise activities, the costs are used to determine the customer rates for the services provided.

It is our opinion that there is a lack of accountability to each department for contributions into and expenditures from the Fleet Reserve Fund to show actual costs associated with each department’s operations during each period. Such an accounting is especially important for enterprise activities (including fire, aviation, electric, gas, water, solid waste, and golf) to demonstrate transparency to its customers that rates paid are fair and that there is accountability for revenues received and expenses incurred.

The Office of the City Auditor intends to conduct a more thorough review of the Fleet Reserve Fund and the impacts to all City departments.

Because of the complexity of the current accounting process, and differences of opinion between DMA and the Office of the City Auditor as to the adequacy of the accounting for vehicles, it is our intent to conduct a more thorough review of the Fleet Reserve Fund and the impacts to all City departments, rather than just the impact to the Fire Department. Based upon the results of that review, we will issue a separate report should significant differences of opinion continue to exist.

In the meanwhile, we recommend that DMA implement a process to:

We recommend that DMA clarify the Fleet Management Policy and implement a methodology to account for departments' contributions into and expenditures from the Fleet Reserve Fund.

1. Revise City Commission Policy #124, "Fleet Management," to clearly indicate whether the Fleet Reserve Fund is operated as a "fully funded program" or as a "pay as you go program."
2. Determine a methodology to allocate the current balance in the Fleet Reserve Fund to each department, or to general government activities as a whole and to each business-type activity.
3. Implement a process to more timely review and update the projected vehicle replacement needs and rates to be contributed into the Fleet Reserve Fund, by vehicle and by department.
4. Track each department's contributions into and cost of vehicles received from the Fleet Reserve Fund and provide the accounting to using departments.

Conclusion

As we conducted our procedures to answer our audit objectives, we identified several areas where improvements can be made related to the acquisition and disposal of fire vehicles, the accounting for fire vehicles, and the inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses.

These issues were related to:

- The life expectancy of fire vehicles, management of leased vehicles to the VFDs, and payments to the VFDs for agreed upon annual vehicle maintenance.
- The inspection, testing, repairing, and accounting for fire hydrants, ladders, and hoses. Independently, these areas would generally not cause great concern. However, when considered collectively, these areas, unless improvements are made, could negatively impact the manner in which the

Fire Department provides fire protection services to the citizens of Leon County.

- The accountability to the Fire Department, as well as other City departments, for contributions into and expenditures from the Fleet Reserve Fund to show actual costs associated with each department's operations during each period.

Management's action plan to address these issues is located in Appendix A of this report.

Appendix A provides management's action plan to address each of the issues identified in this report.

We would like to thank and acknowledge the full and complete cooperation and support of the Fire Department, Fleet Management Division, Department of Management and Administration, City Water Utility, Information Systems Services, Treasurer-Clerk, and Talquin Electric Cooperative, Inc.

***Response From
Appointed
Official***

City Manager:

I want to thank the City Auditor and his staff for sharing their knowledge and for their assistance in this cooperative effort. I'm confident the recommendations will improve our processes and overall operations. Staff from the various departments involved have developed action plans and implementation plans to specifically address the audit issues and for accountability. We look forward to implementing and monitoring the recommendations outlined in our Action Plan.

APPENDIX A - Action Plan		
Action Steps	Responsible Employee	Target Date
A. Objective: To ensure that the fire vehicles are retained for their maximum useful life.		
1. To review the expected life of fire response vehicles, determine whether it would be more cost-efficient and effective to extend the useful life prior to disposal, and make changes in life expectancy as determined.	Cindy Dick, Fire Chief Terry Lowe, Fleet Superintendent	1/15/07
B. Objective: To ensure that the Fire Department and VFDs comply with mutual agreements regarding the leased fire vehicles.		
1. Develop a process to ensure that there are executed lease agreements with all VFDs for the leased fire vehicles on an annual basis.	Cindy Dick, Fire Chief Terry Lowe, Fleet Superintendent	1/15/07
2. Ensure there are properly executed lease agreements for the current lease period.	Cindy Dick, Fire Chief	1/15/07
3. Establish a methodology (based on industry standards) that can be consistently applied to establish the cash value of the leased fire vehicles and equipment.	Terry Lowe, Fleet Superintendent	1/15/07
4. Establish a process to ensure that the cash value information is provided to the VFDs in a timely manner prior to their annual insurance renewal deadlines.	Terry Lowe, Fleet Superintendent	1/15/07
5. Develop a process to ensure that the leased fire vehicles have been properly insured on an annual basis.	Cindy Dick, Fire Chief Terry Lowe, Fleet Superintendent	1/15/07
6. Review the VFDs' actual maintenance costs determine if the maintenance payment should be revised in the mutual lease agreement.	Cindy Dick, Fire Chief Terry Lowe, Fleet Superintendent	1/15/07

Action Steps	Responsible Employee	Target Date
7. Implement a process to ensure that the amount paid to the VFDs for vehicle maintenance complies with the fire services agreement.	Cindy Dick, Fire Chief Terry Lowe, Fleet Superintendent	1/15/07
C. Objective: To improve the consistency and quality of: a) hydrant testing and reporting of deficiencies; b) hydrant maintenance and reporting of completed repairs; and c) notification of newly installed hydrants.		
1. Develop a written agreement and process identifying the responsibilities of each department related to the inspection and maintenance of fire hydrants.	Jim Oskowis, Water Utility Manager Cindy Dick, Fire Chief	8/31/06
2. Execute and implement the written agreement identifying the responsibilities of each department related to the inspection and maintenance of fire hydrants.	Jim Oskowis, Water Utility Manager Cindy Dick, Fire Chief	8/31/06
3. Develop and execute a written agreement between the City and Talquin Electric Cooperative, Inc., identifying the responsibilities of each department related to the inspection and maintenance of fire hydrants, and the process to notify the Fire Department when new hydrants are added onto the Talquin Electric Cooperative, Inc., water system.	Cindy Dick, Fire Chief Steve Marks, Deputy Fire Chief	8/31/06
4. Review the related fire services agreement between the City and Leon County to determine whether the agreement needs to be revised to ensure that Talquin Electric Cooperative, Inc., will be required to work with the City related to the inspection, maintenance, and notification of fire hydrants.	Cindy Dick, Fire Chief Steve Marks, Deputy Fire Chief	8/31/06
5. As deemed necessary in Step 4, revise and execute the identified fire services agreement.	Cindy Dick, Fire Chief Steve Marks, Deputy Fire Chief	8/31/06

Action Steps	Responsible Employee	Target Date
6. Develop and implement a process to uniquely identify fire hydrants by all parties related to the inspecting, testing, and maintenance of fire hydrants.	Jim Oskowis, Water Utility Manager Cindy Dick, Fire Chief	8/31/06
D. Objective: To ensure that the Fire Department only utilizes ladders and hoses that have been properly tested and are in good working condition.		
1. Develop and implement a process to inventory and track the acquisition, testing, and disposition of fire hoses.	Cindy Dick, Fire Chief Steve Marks, Deputy Fire Chief	10/1/06
2. Develop and implement a process to inventory and track the acquisition, testing, and disposition of fire ladders (including consistently marking each ladder in an unique manner).	Cindy Dick, Fire Chief Steve Marks, Deputy Fire Chief	10/1/06
E. Objective: To ensure that each fire truck has the appropriate equipment in the proper locations.		
1. Develop a process to periodically update the apparatus checklists to reflect what equipment is needed in specific locations on the various types of fire trucks.	Cindy Dick, Fire Chief Steve Marks, Deputy Fire Chief	1/15/07
2. Update the current apparatus checklists to reflect what equipment is needed in specific locations on the various types of fire trucks.	Cindy Dick, Fire Chief Steve Marks, Deputy Fire Chief	1/15/07

<p>F. Objective: To determine and implement the most appropriate accounting practice for the funding of City vehicles.</p>		
<p>1. DMA conduct further research and consult with the Office of the City Auditor to determine the most appropriate accounting practice for the funding of City vehicles.</p>	<p>David Reid, Management and Administration Director</p>	<p>9/30/06</p>
<p>2. DMA review the Fleet Management Policy and clarify the language to ensure that the vehicle replacement rate calculation meets the policy's intentions.</p>	<p>David Reid, Management and Administration Director</p>	<p>9/30/06</p>

APPENDIX B – Leased or Donated Fire Trucks

Year	Make	Cost	Leased or Donated to:	Date of 2004 Agreement	Agreement has Start & End Dates	Agreement Signed	If we sold at 10% Cost
1989	Mack Pumper Truck	\$ 125,264	Lake Iamonia VFD	10/26/04	No	Yes	\$ 12,526
1959	American LaFrance Pumper Truck	\$ 22,658	Lake Jackson VFD	None	n/a	n/a	\$ 2,266
1992	Chevrolet Cheyenne Brush Truck	\$ 27,989	Lake Jackson VFD	10/28/04	No	Yes	\$ 2,799
1989	Mack Pumper Truck	\$ 125,264	Lake Jackson VFD	11/2/04	No	Yes	\$ 12,526
1970	International 1700A Tanker Truck	\$ 9,000	Lake Talquin VFD	10/28/04	No	Yes	\$ 900
1989	Mack Pumper Truck	\$ 125,264	Lake Talquin VFD	10/27/04	No	Yes	\$ 12,526
1977	Int'l F1800 Tanker Truck	\$ -	Lake Talquin VFD	None	n/a	n/a	\$ -
1985	GMC Brigadier Pumper Truck	\$ 79,350	Miccosukee VFD	None	n/a	n/a	\$ 7,935
1976	GMC Brush Truck	\$ 22,248	Miccosukee VFD	None	n/a	n/a	\$ 2,225
1989	Mack Tanker Truck	\$ 125,264	Miccosukee VFD	None	n/a	n/a	\$ 12,526
1977	Chevrolet Brush Truck	\$ 7,068	Woodville VFD	2/2/05	Partial (1)	Yes	\$ 707
1978	Chevrolet	\$ 5,033	Donated to St Francis Wildlife	n/a	n/a	n/a	\$ 503
Totals		\$ 674,403					\$ 67,440

Note: (1) The lease agreement includes start date, but not end date.

Source: Cost information obtained from the FASTER system and Vehicle Lease Agreements were obtained from the Fire Department.

**Lake Talquin Volunteer Fire Department
1970 International Tanker Truck**



**Lake Talquin Volunteer Fire Department
1989 Mack Pumper Truck**



**Lake Jackson Volunteer Fire Department
1989 Mack Pumper Truck**



Lake Jackson Volunteer Fire Department
1992 Chevrolet Cheyenne Brush Truck



Micosukee Volunteer Fire Department
1985 GMC Brigadier Pumper Truck



**Micosukee Volunteer Fire Department
1989 Mack Tanker Truck**



**Micosukee Volunteer Fire Department
1976 GMC Brush Truck**



**Woodville Volunteer Fire Department
1977 Chevrolet Brush Truck**



**Lake Iamonia Volunteer Fire Department
1989 Mack Pumper Truck**



APPENDIX C – Analysis of Fire Contributions Into and Replacement Acquisitions from the Fleet Reserve Fund

(Notes on next page)

Fiscal year	Source:	Fire Vehicle Replacement Contributions	Fire Vehicle Acquisitions (3)	Proceeds from Sales/Trade Ins (4)	Estimated Interest Earnings on Balance in Fleet Reserve Fund (5)	Estimated Balance YE in Fund (6)	Estimated Rate of Return (7)
1987 Estimated	(1)	0	\$ -			\$ 500,000	5.00%
FY 1987	Estimated (2)	\$ 300,000	\$ 12,168		\$ 25,000.00	\$ 812,832	5.00%
FY 1988	Estimated (2)	\$ 300,000	\$ 131,044		\$ 40,641.60	\$ 1,022,430	5.00%
FY 1989	Estimated (2)	\$ 400,000	\$ 900,007		\$ 51,121.48	\$ 573,544	5.00%
FY 1990	Estimated (2)	\$ 500,000	\$ 359,687		\$ 28,677.20	\$ 742,534	5.00%
FY 1991	Estimated (2)	\$ 600,000	\$ 464,905		\$ 37,126.71	\$ 914,756	5.00%
FY 1992	Estimated (2)	\$ 700,000	\$ 233,875		\$ 45,737.80	\$ 1,426,619	5.00%
FY 1993	DMA Report	\$ 813,872	\$ 86,941		\$ 71,330.94	\$ 2,224,881	5.00%
FY 1994	DMA Report	\$ 354,914	\$ 1,770,730		\$ 111,244.04	\$ 920,308	5.00%
FY 1995	DMA Report	\$ 386,235	\$ 70,536		\$ 46,015.42	\$ 1,282,022	5.00%
FY 1996	Old FMS	\$ 365,351	\$ 4,491,355		\$ 64,101.12	\$ (2,779,880)	5.00%
FY 1997	Old FMS	\$ 511,001	\$ 3,437,734	\$ 50,500	\$ -	\$ (5,656,113)	6.49%
FY 1998	Old FMS	\$ 637,074	\$ 8,500	\$ 44,400	\$ -	\$ (4,983,139)	5.90%
FY 1999	Old FMS	\$ 577,451	\$ 1,389,064		\$ -	\$ (5,794,752)	5.30%
FY 2000	PeopleSoft	\$ 898,555	\$ 756,333	\$ 1,800	\$ -	\$ (5,650,730)	5.80%
FY 2001	PeopleSoft	\$ 593,600	\$ 1,198,883		\$ -	\$ (6,256,013)	6.60%
FY 2002	PeopleSoft	\$ 623,292	\$ 365,493	\$ 103,920	\$ -	\$ (5,894,294)	3.47%
FY 2003	PeopleSoft	\$ 989,555	\$ 1,506,799	\$ 7,247	\$ -	\$ (6,404,291)	3.97%
FY 2004	PeopleSoft	\$ 1,011,839	\$ 835,699	\$ 129,002	\$ -	\$ (6,099,149)	2.45%
Totals		\$ 10,562,738	\$ 18,019,753	\$ 336,869	\$ 520,996	\$ (6,099,149)	
			\$ 11,920,604	Total "put into" the fund by Fire (includes contributions, those bought from other funds (7), proceeds (3), and interest (4))			
			\$ 18,019,753	Acquisitions			
			\$ (6,099,149)	Total "put into" the fund less Acquisitions			

APPENDIX C (Continued)**NOTES:**

- (1) Accounting Services and Office of the City Auditor staff agreed to start off in 1987 conservatively with \$500,000.
- (2) Sources were obtained from various sources:
 - Estimated - These records were not available, but we do know that in 1992 the City had reevaluated the Fleet Replacement Fund balance and reduced the contributions required by departments by 50%. These estimates were agreed upon by Budget and Accounting staff.
 - DMA accounting reports.
 - Old FMS (Financial Management System) – archived data.
 - PeopleSoft Financial System.
- (3) Fire vehicle acquisition information was obtained from the City's Financial Asset system and only includes those transactions that were for replacement vehicles (i.e., does not include additional vehicles).
- (4) Acquisitions purchased from other funds – these were identified and should not to be accounted for in the Fleet Reserve Fund.
- (5) Proceeds from sales and/or trade ins - Disposition information comes from the DMA Municipal Supply Center and Fleet records.
- (6) Estimated interest - This is a calculation of the prior year balance X the estimated return on investments in column 8.
- (7) Estimated year-end balance of Fire Contributions in the Fleet Reserve Fund is calculated by: Prior YE balance + Contributions - Acquisitions + Proceeds from sales/trade in + interest earnings.
- (8) Estimated rate of return – based on Fire Department's estimated year-end balance and the estimated or actual earnings. Actual earnings were obtained from City Treasurer-Clerk's Office. The estimated rate of return (5%) was reviewed and agreed upon by Budget and Accounting Services staff.