

# Chesapeake VIRGINIA

## CHESAPEAKE FIRE DEPARTMENT PERFORMANCE AUDIT



**JULY 1, 2006 THROUGH JUNE 30, 2007**

**CITY OF CHESAPEAKE, VIRGINIA  
AUDIT SERVICES DEPARTMENT**

Audit Services Department  
306 Cedar Road  
P.O. Box 15225  
Chesapeake, Virginia 23328  
(757) 382-8511  
Fax (757) 382-8860

May 28, 2008

The Honorable Dalton S. Edge and  
Members of the City Council  
City of Chesapeake  
City Hall – 6<sup>th</sup> Floor  
Chesapeake, Virginia 23328

Dear Mayor Edge and Members of the City

We have completed our review of the Chesapeake Fire Department (Fire Department) for July 1, 2006 to June 30, 2007. Our review was conducted for the purpose of determining whether Fire Department was providing services in an economical, efficient, and effective manner, whether its goals and objectives were being achieved, and whether it was complying with applicable City and Department procedures in areas of payroll, safety, information technology, recruitment, turnover, operations, and grants management.

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.

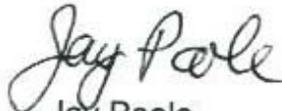
The Fire Department provided essential services within the 353 square miles of the City of Chesapeake (City). It provided rapid response to fires, medical emergencies, rescues, hazardous material incidents, natural and man-made disasters, mutual aid assistance to neighboring departments, and related emergencies to reduce life and property loss. The Fire Department also provided specialized rescue operations and supported regional hazardous materials and Federal Emergency Management Agency teams, and maintained a constant level of readiness through professional training and development. The Emergency Medical Services (EMS) Function is an integral component of the Fire Department, consisting of approximately 70 percent of the overall emergency response workload. The EMS function itself provided services to include all aspects of pre-hospital patient care, from rapid response to assessment, treatment and transport of the sick and injured. Specialized programs included the Special Cares and Needs (SCAN) program and the Public Access Defibrillation (PAD) Program. In addition, EMS provided support to the Police Department's SWAT Medic Program, the Regional Haz-Mat Medic Program, and the Technical Rescue Team.

For Fiscal Year (FY) 2006-2007, the Fire Department had an operating budget of over \$36.6 million and an authorized compliment of approximately 432 personnel, approximately 410 of which were in Fire/EMS operations. The Fire Department received funds from Federal, State, and City sources. It shared the Public Safety Building in Great Bridge with the Police Department.

Based on our review, we determined the Fire Department had accomplished its overall mission of providing rapid response to fires, medical emergencies, rescues, hazardous material incidents, natural and man-made disasters, as well as Fire Department support services. However, we did identify several significant issues that needed to be addressed. These issues were correcting the Telestaff system, developing payroll processes, decreasing response time, reducing sick leave accruals, and decreasing overtime. Longer term, the Fire Department needed to address the twenty-year plan and the rising rate of EMS calls.

This report, in draft, was provided to Fire Department officials for review and response. Their comments have been considered in the preparation of this report. These comments have been included in the Managerial Summary, the Audit Report, and Appendix A. Fire Department and EMS management, supervisors, and staffs were very helpful throughout the course of this audit. We appreciated their courtesy and cooperation on this assignment.

Sincerely,



Jay Poole  
City Auditor  
City of Chesapeake, Virginia

C: William Harrell, City Manager  
R. Steven Best, Fire Chief

## **Managerial Summary**

### **A. Objectives, Scope, and Methodology**

We have completed our review of the Chesapeake Fire Department (Fire Department) for July 1, 2006 to June 30, 2007. Our review was conducted for the purpose of determining whether Fire Department was providing services in an economical, efficient, and effective manner, whether its goals and objectives were being achieved, and whether it was complying with applicable City and Department procedures in areas of payroll, safety, information technology, recruitment, turnover, operations, and grants management.

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For Fiscal Year (FY) 2006-2007, the Fire Department had an operating budget of over \$36.6 million and an authorized compliment of approximately 432 personnel, approximately 410 of which were in Fire/EMS operations. The Fire Department received funds from Federal, State, and City sources. It shared the Public Safety Building in Great Bridge with the Police Department.

To conduct this audit, we reviewed and evaluated City and Fire Department policies and procedures, and operations documents and reports. Also, we evaluated statistical data related to staffing levels and turnover, and conducted surveys of other local Fire Departments. We conducted site visits and “ride-a-longs” at two stations. We discussed these audit areas and conducted interviews with the Deputy Fire Chief, Support Services Division Chief, Chief Medical Officer, Staffing Chief, Battalion Chief, Accounting Supervisor, Payroll Technicians, and various EMS personnel.

## **Major Observations and Conclusions**

Based on our review, we determined the Fire Department had accomplished its overall mission of providing rapid response to fires, medical emergencies, rescues, hazardous material incidents, natural and man-made disasters, as well as Fire Department support services. However, we did identify several significant issues that needed to be addressed. These issues were correcting the Telestaff system, developing payroll processes, decreasing response time, reducing sick leave accruals, and decreasing overtime. Longer term, the Fire Department needed to address the twenty-year plan and the rising rate of EMS calls.

This report, in draft, was provided to Fire Department officials for review and response. Their comments have been considered in the preparation of this report. These comments have been included in the Managerial Summary, the Audit Report, and Appendix A. Fire and EMS Department management, supervisors, and staffs were very helpful throughout the course of this audit. We appreciated their courtesy and cooperation on this assignment.

## **B. Performance Information**

The Fire Department has grown from its early days when it was just several small departments to a department that is faced with a growing population, a large sprawling city, and environments ranging from airports, and industrial sites to swamps. The Fire Department has met its operational goals by having 15 Fire/EMS stations, a cadre of over 400 well trained and highly qualified fire fighters, and over three dozen apparatus of various types. In addition, the Fire Department was responsible for responding to an average of over 23,000 Fire/EMS calls over the last fiscal year. Further, the citizens of Chesapeake responded to a citywide services telephone survey conducted by Continental Research Associates, Inc., and ranked the Fire Department services as number one in both Importance and in Customer Satisfaction to our citizens. Also, the Fire Department received two large grants in FY07. One grant was for the purchase of homes that are repeatedly flooded and the second grant was for the establishment of a State Strategic Radio Cache.

## **C. Payroll, Staffing, and Systems Issues**

While the Fire Department appeared to be effectively accomplishing its overall mission, we did identify some areas where administrative and operational practices could be enhanced. For example, we noted that the Telestaff and payroll systems needed to be better documented and additional training given to various staff members. The sick leave accruals were found to be in excess of neighboring cities. An examination of overtime indicated the need to better manage its usage.

### **1. Telestaff System**

**Finding** – The Fire Department was not utilizing the Telestaff system to its optimal capacity.

**Recommendation** - The Fire Department should reconfigure the Telestaff system and provide additional training, so that the system can be better utilized.

**Response** - The Telestaff system is currently utilized to automate and manage the staffing needs of the department. Daily staffing is currently managed by one of our on-duty Battalion Chiefs. On a daily basis, there are three Battalion Chiefs on duty. The Battalion Chief in this assignment acts as a Staffing Chief. In addition to the Fire Department's staffing responsibilities, this person is responsible for their daily administrative duties along with responding to emergency calls for service. He or she is responsible for initiating the system to staff all vacancies. The full text of the response is included in the audit report.

### **2. Payroll**

**Finding** – The Fire Department's payroll process needed to be enhanced. Supporting documentation was not always submitted in a timely manner. Discrepancies existed between forms received and entries processed on the Telestaff system, and the approval process for overtime forms was inconsistent.

**Recommendation** - The Fire Department should document internal payroll policy and procedures. Also, all supporting documentation for leave and overtime should be processed in the pay period in which it occurred.

**Response** – The Fire Department’s payroll system is supported by 1.5 FTEs. With limited staff, we are experiencing time-consuming payroll processing and inaccuracy issues during data collection. Because payroll deadlines are prior to the end of each pay period, it is difficult at best to process leave and overtime within the pay period in which it has occurred. The Fire Department has requested an upgrade to our Part-Time Payroll position. The full text of the response is included in the audit report.

### **3. Sick Leave Accrual**

**Finding** - The accrual rate for sick leave for City firefighters was 24 hours a month. This rate was three times the sick leave accrual rate of regular City employees. Sick leave for regular employees was being accrued at 8 hours per month as defined in the City’s Employee Handbook. The work day for sworn firefighters who work a 56-hour workweek was defined as 11.2 hours. In addition, the sick leave accrual rate was also two to two and one half times the accrual rate of other cities in this geographic area. The work day for firefighters was not adequately documented in the City’s Human Resources Administrative Regulations and related policies.

**Recommendation** – The sick leave accrual rate for firefighters who work 56 hours per week should be defined to be one 11.2 hour work day per month rather than the current accrual of 24 hours per month. The agreement should also be formalized as an Administrative Regulation.

**Response** – The sick leave accrual rate for firefighters who work 56 hours per week is defined as 24 hours for one day’s leave per month. This rate was established in 1963 and has been in place since the Department’s inception.

In 1978, it was decided to convert annual leave accrual rates to reflect a correlation between a Firefighter’s 56 hour work week and a 40 hour work week employee. Thus, in 1978, firefighters began to accrue annual leave based upon the ratio of 11.2 hours for one “day” of annual leave. Or as traditionally stated “11.2 hours is to 56 hours what 8 hours is to 40”. This accrual rate for annual leave is still in effect today. Conversely, in 1978, a decision was made to allow firefighter sick leave accrual rates to remain at the traditional 24 hour per day leave rate per month. The full text of the response is included in the audit report.

### **4. Overtime**

**Finding** - Overtime increased by 15.4% from FY 2006 to FY 2007 and was over budget by \$1,743,952 for FY 2007 and \$1,969,977 for FY 2006. The Fire Department did not use cost as a factor in assigning overtime.

**Recommendation** - The Fire Department should take steps to enhance its efforts to manage and control overtime costs.

**Response** – There are many factors that contribute to overtime usage. Retirements, attrition, minimum staffing requirements, sick leave usage, annual leave usage, Military deployments, members on extended sick leave, temporary duty assignments to supplement the training staff for recruit academies, postponement of previously scheduled recruit schools are all contributing elements of staffing shortages.

A recurrence of vacancies over consecutive years has required the Fire Department to rely on overtime to maintain minimum staffing as directed by the Manager and Council. All of the single engine company fire stations have a staffing minimum of four firefighters and all of the multi-company fire stations must maintain a three firefighter minimum on each apparatus. Minimum staffing is a requirement which enhances firefighter safety, efficiency and our ability to meet the national standard outlined in the National Fire Protection Association (NFPA) 1710 standard. This standard contains minimum requirements relating to the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by substantially all career fire departments. For a more comprehensive review of the overtime issue, please see Appendix B.

#### **D. Other Administrative and Operational Issues**

We noted that the Fire Department was not meeting the NFPA 1710 standard of arriving on the emergency scene within five minutes of ring down. Additionally, we noted that the donation account was not being handled correctly per Administrative Regulations. Finally, we observed that Hot Zone Enterprise had not been created properly in full compliance of IRS tax code, State Corporation Commission rules, and trademark regulations.

#### **5. Response Time**

**Finding** – The Fire Department was not meeting the five minute first response time guideline promulgated by National Fire Protection Association Standard 1710 (NFPA 1710). In addition the existing twenty year plan did not adequately address the trend of the Fire Department toward increased EMS calls and decreased fire suppression calls, and only incrementally addressed the need to meet the NFPA 1710 requirement of a five minute first response time with full compliance in 2025.

**Recommendations** - The Fire Department should develop a comprehensive action plan that illustrates how it plans to achieve this goal of a five minute first response time.

**Response** - The Fire Department is committed to achieve the goals established in the NFPA 1710 standard. However, due to the intricacy of the NFPA 1710's response time requirement, the Fire Department would have to increase its complement of personnel, apparatus, and fire stations. There are some fire station locations that make it

**Response** – A revision to the Standard Operating Procedure for the Fire Department’s PAD Program has been completed. This standard operating procedure outlines the processes for training, recertification, equipment maintenance and testing, and Fire Department integration.

A Field Medical Officer (FMO) with the Fire Department has been designated as Program Manager. His duties are to maintain proper training and recertification, maintenance and repair, inventory, and record keeping. He is listed as the point of contact. All documentation is currently being reviewed for updates. These duties are in addition to the normal responsibilities of the FMO. The FMO is responsible for emergency response to calls for service, supervision of medical care, and oversight of all patient care documentation.

## **8. Hot Zone Enterprise**

**Finding** - Our test of the records revealed that Hot Zone Enterprise was not legally established as a not-for-profit entity.

**Recommendation** - The Fire Department should ensure Hot Zone Enterprise’s compliance with the IRS tax code, State Corporation Commission rules, and trademark regulations.

**Response** – The Hot Zone is a not-for-profit fund raising enterprise that supports the Morale and Recreation activities for the firefighters, paramedics, civilian support staff and their families. One-hundred percent of the donations are used to fund special events such as the Family Picnic Day, the Annual Retirement Dinner, and the Christmas Parade Cook-out. The current Hot Zone account was established after collaborating with our City Treasurer’s Office.

In light of the information found in this report, it appears that the Hot Zone Enterprise should be created as a stand alone non-profit entity. The Fire Department will work together with the City Attorney’s Office to insure our activity complies with all applicable City regulations to include compliance with State and Federal laws.

geographically impossible to achieve the response goals of the NFPA 1710 standard. The Fire Department recommended a Long-Range Plan to City Council in 2005. This plan includes incremental accompaniments of fire station relocations, new fire stations, personnel, fire apparatus and medic units. Due to the high cost of the entire plan, the Fire Department was advised to create a plan that was incremental. Thus, the plan encompasses 20 years. The full text of the response is included in the audit report.

## **6. Donation Account**

**Finding** - The donation account was not being used as originally intended. Funds were not endorsed and deposited immediately upon receipt, checks were not being endorsed immediately upon receipt, cash receipt and cash disbursement journals were not being maintained and the account has not been reconciled monthly.

**Recommendation** - The donation account should only be used for donations. Supporting documentation should be maintained for all transactions. The donation account should be reconciled on a monthly basis.

**Response** – In the past, the City disposed of the deferred accounts in the mainframe and created a "donations" account in PeopleSoft. We were told to use the account in the same manner as the deferred account. Therefore, we continued to include refunds and reimbursements. Much later a recovery and rebates account was established to deposit these funds and segregate them from the donations. Deposits were made as batches and not on a daily basis. This has been corrected and deposits are made when a payment is received. A monthly reconciliation is now part of the closing process.

Additionally, we are now required to appropriate all donations, refunds and reimbursements. Paperwork was submitted to Finance in order to have all deposits appropriated at the end of last fiscal year. We will compile a list with copies of the deposits for this fiscal year and request an appropriation for those funds. Beginning next fiscal year we will request our appropriations quarterly.

## **7. Review of the Public Access Defibrillator (PAD) Program at the City Hall Building**

**Finding** – The list of Access Emergency Defibrillator (AED) Operators at the City Hall building was not current, contact numbers were not listed, and several AED Operators' listed had not been recertified. In addition, the equipment was not being tested in accordance with the Fire Departments Standard Operating Procedures.

**Recommendation** – The Fire Department should ensure that the PAD program is monitored and is operating in accordance with Fire Department Standard Operating Procedures. In addition, we recommend that all buildings and departments where PAD units were placed be reviewed to ensure the lists of AED operators contain current information that AED operators have been recertified.

CHESAPEAKE FIRE DEPARTMENT

PERFORMANCE AUDIT

JULY 1, 2006 TO JUNE 30, 2007

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## **Methodology**

To conduct this audit, we reviewed the Fire Department's policies, procedures, and practices. This review included testing and evaluation of the department's Telestaff system, which was used by the department for staff scheduling. We conducted extensive analysis of the department's payroll and leave practices. We also reviewed their compliance with strategic plans as evidenced by their progress toward National Fire Protection Association standards.

In addition to these items, we reviewed compliance with City policies and procedures on payroll and donations. We reviewed citizen satisfaction surveys, departmental reports, and grant awards. We also interviewed numerous staff from Fire Department Command staff to Payroll Technicians and Emergency Medical Services staff.

## **B. Performance Information**

The Fire Department has grown from its early days when it was just several small departments to a department that is faced with a growing population, a large sprawling city, and environments ranging from airports, and industrial sites to swamps. The Fire Department has met its operational goals by having 15 Fire/EMS stations, a cadre of over 400 well trained and highly qualified fire fighters, and over three dozen apparatus of various types. In addition, the Fire Department was responsible for responding to an average of over 23,000 Fire/EMS calls over the last fiscal year. Further, the citizens of Chesapeake responded to a citywide services telephone survey conducted by Continental Research Associates, Inc., and ranked the Fire Department services as number one in both Importance and in Customer Satisfaction to our citizens. Also, the Fire Department received two large grants in FY07. One grant was for the purchase of homes that are repeatedly flooded and the second grant was for the establishment of a State Strategic Radio Cache.

### **1. History**

The Chesapeake Fire Department was formed in 1963 with the merger of the City of South Norfolk and Norfolk County. The Department melded together several independent fire companies that had been providing service to the local communities since 1892. The Department has grown since that beginning and boasts over 400 well trained fire fighters divided into three battalions, three shifts, and an administrative section.

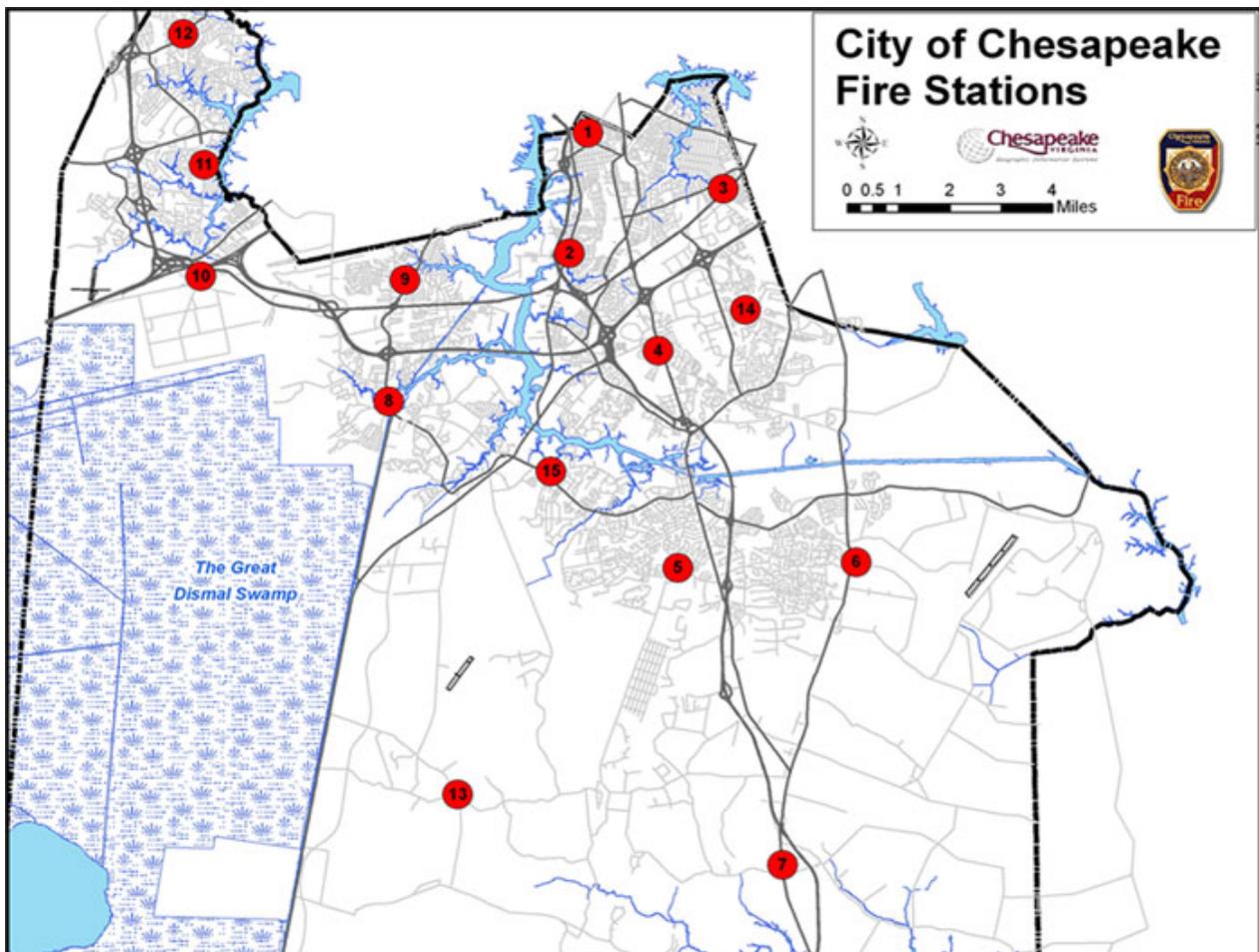


*Fire Station #14*

## Stations

The Department has 15 stations to cover the 353 square miles of the City. These stations were strategically located throughout the City to provide quick and responsive service. The type of service required could change drastically from station to station depending on the area of the City. The Department required the ability to fight urban fires in the well developed north and center of the city while at the same time maintaining the ability to manage brush fires in the rural southern portion of the City. Add in two small airports, several major industrial sites, miles of waterway, one swamp, and over 220,000 people and the needs placed on the Fire Department has caused it to become one of the most diversified and capable in the region.

Exhibit 1



## 2. Equipment

The City fire equipment was wide-ranging and reflective of the many diverse types of emergencies that are handled each year. The Department had 3 Battalion Chief vehicles, 3 EMS vehicles, 17 Engines, 3 Ladders, 10 Medic Units, five brush trucks, one boat, one foam truck with trailer, one haz-mat unit, and a command bus. There is also a dedicated squad truck for the Technical Rescue team.

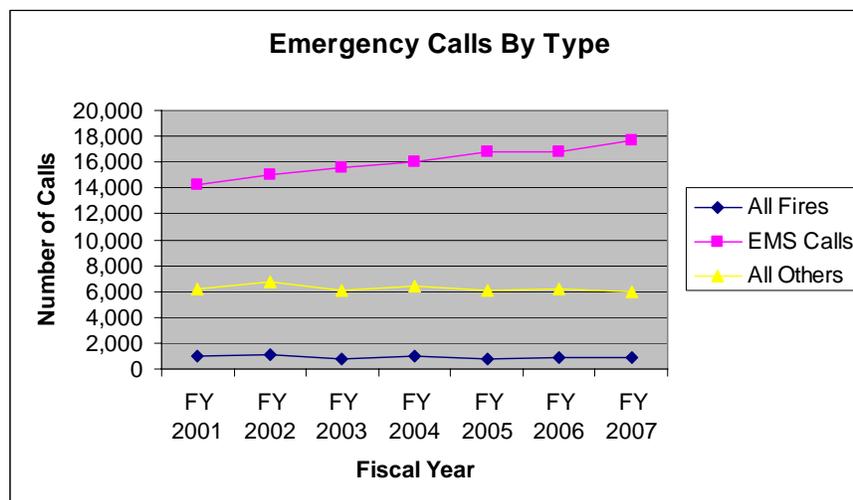


*Ladder 5*

## 3. Call Volume

From FY 01 to FY 07, the Fire Department averaged over 23,000 emergency calls a year. Between FY 01 and FY 07, the call volume grew from 21,400 in FY 2001 to 24,508 in FY 07, a 14.52% growth increase. This was due to a 24.46% increase in EMS calls from FY 01 – FY 07. Fires of all types dropped 16.27% over those same fiscal years.

**Exhibit 2**



#### 4. Citizen Satisfaction

A telephone survey of Chesapeake citizens was conducted by Continental Research Associates, Inc., a Hampton Roads marketing research firm. A total of 301 interviews were completed from August 23<sup>rd</sup> through September 18<sup>th</sup> of 2007. The purpose of the study was to learn how Chesapeake residents felt about their community and the services that are provided by the City. In this survey, released in September 2007, the Fire Department had the highest scores for level of importance and level of satisfaction of any City department or service ranked in the survey. The Fire Department scored a 97% as being the most important service or department in Chesapeake. The Fire Department also scored a 93.4% when it came to citizen satisfaction with the job the Fire Department was doing. Both were the highs in each category.

Exhibit 3

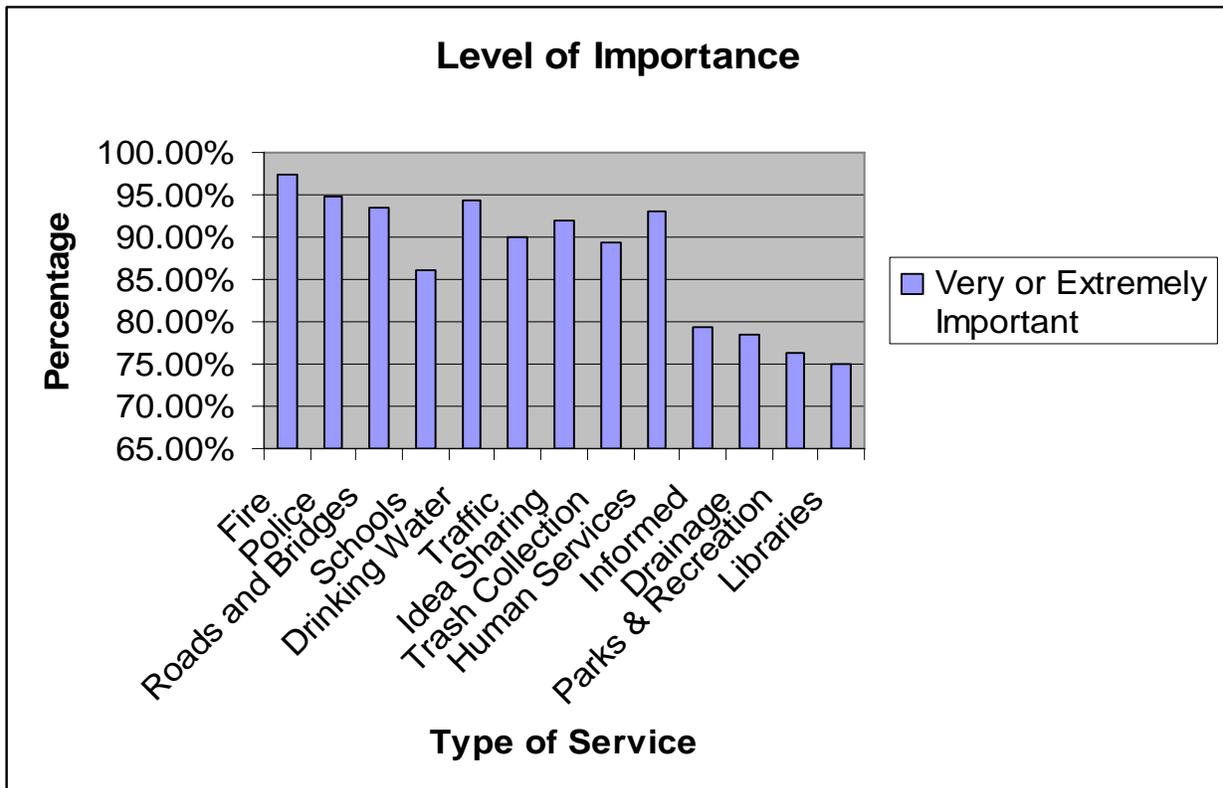
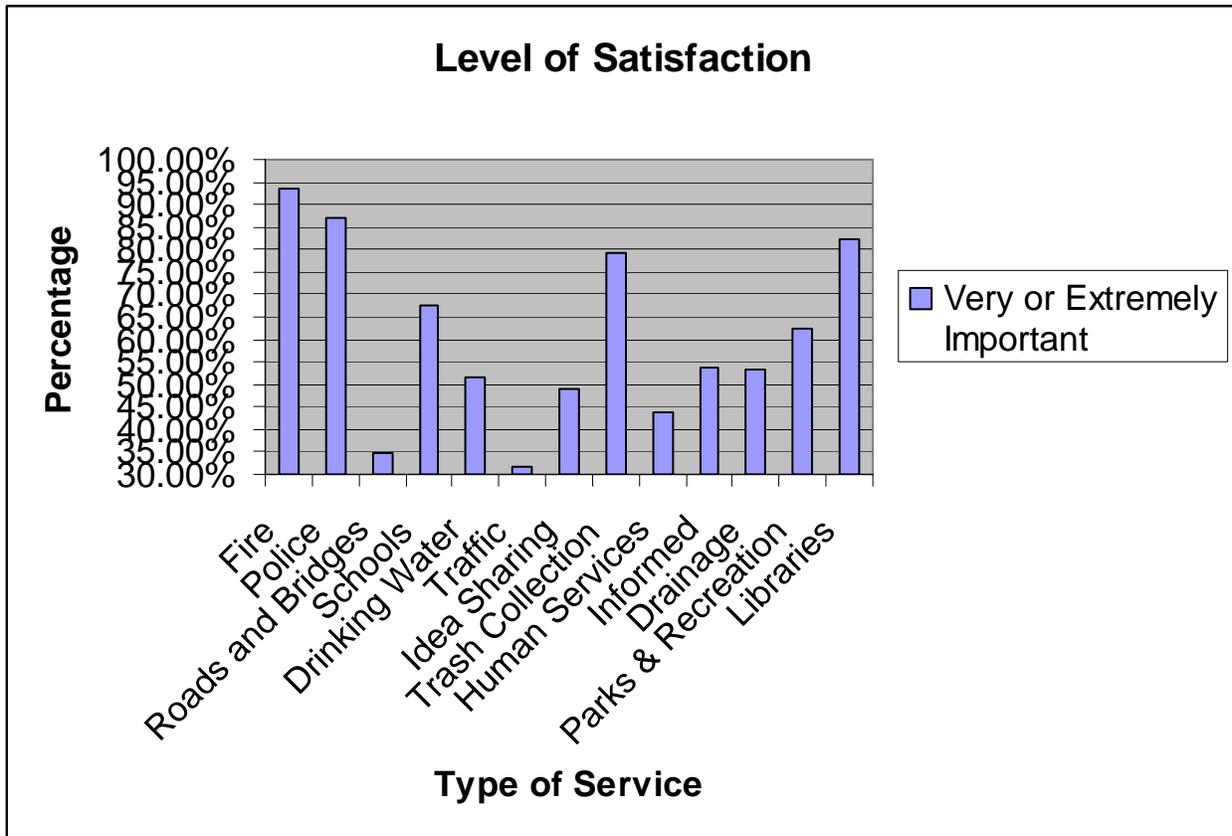


Exhibit 4



## 5. Grants

The Fire Department was recently awarded two major Homeland Security grants. The first grant was awarded from the Federal Emergency Management Agency's (FEMA's) Repetitive Flood Claims (RFC) for \$1,230,578 and the second grant was awarded from the Department of Homeland Security, Office of Grants and Training (G&T) and administered by the Commonwealth for \$1.9 million dollars.

On September 12, 2007, the City was awarded \$1,230,578 from FEMA through the RFC grant program. Chesapeake was the only locality in the Commonwealth to receive this grant award. The RFC grant program provided 100% reimbursement for projects. The funds from the 2007 RFC grant program will be used to purchase three repetitive flood loss properties, demolish them and turn them into open space for all perpetuity. The City was committed to building disaster resistance into the community and this grant opportunity allows the mitigation strategy of acquisition of properties and turning them into open space to be accomplished. This method to eliminate potential future damages to structures from flooding is part of the City's Natural Events Hazard Mitigation Plan.

In addition, on July 24, 2007, the City was awarded \$1.9 million for a State Strategic Radio Cache, from the FY 2007 Homeland Security Grant Program issued by the Department of Homeland Security, Office of Grants and Training (G&T) and administered by the Commonwealth. This grant was submitted by Chesapeake on behalf of seven Hampton Roads cities. The City of Chesapeake was the lead agency for the grant, due to the unique geographical boundaries of the region. Plans have been made to house the radio cache between the Peninsula and the Southside. The City of Hampton will house and manage the cache on the Peninsula, while Chesapeake will house and manage the cache on the Southside. This arrangement had been agreed upon by all seven cities that were in support of this grant application.

This radio cache would increase the regional capability to communicate on the 700MHz radio system that was being built in the Overlay Regional Inter Operability Network (ORION) project. The region was committed towards a communication interoperability solution or solutions for local, state, and federal agencies for both voice and data. In summary, the purchase of these radios would support regional interoperability.

Further, the exchange of information pertaining to emergency incidents was critical for first responders. However, in the case of a catastrophic traffic incident (interstate/tunnel), natural disaster (hurricanes or tornadoes), terrorism, or massive vehicle accident (airplane crash), public safety agencies would need mutual aid interoperability or task force interoperability across the region to effectively deal with the incident. Communication during a massive emergency situation with surrounding jurisdictions, state, and federal personnel would be critical. ORION would connect disparate radio systems across Hampton Roads, minimizing confusion in the event of a major, multiregional emergency or disaster. By strategically placing a regional radio cache in the Hampton Roads region, the State would benefit by having a cache ready to be deployed at a moment's notice in a high risk area. Also, the State would have the benefit of a well maintained radio cache and trained personnel that could be deployed within the 2 hour timeframe anywhere in the state.

## **C. Payroll, Staffing, and Systems Issues**

While the Fire Department appeared to be effectively accomplishing its overall mission, we did identify some areas where administrative and operational practices could be enhanced. For example, we noted that the Telestaff and payroll systems needed to be better documented and additional training given to various staff members. The vacation and sick leave accruals were found to be in excess of neighboring cities. An examination of overtime indicated the need to better manage its usage.

### **1. Telestaff System**

**Finding – The Fire Department was not utilizing the Telestaff system to its optimal capacity.**

The Fire Department acquired the Telestaff system in FY 2005. According to its End User Tutorial Guide, Telestaff was designed "...to meet the complex staffing needs of public safety, law enforcement, corrections, and municipalities...Telestaff was created to make the staff scheduling process more efficient." In addition to scheduling, the Fire Department used Telestaff cycle reports to verify leave usage and overtime worked.

In reviewing the Fire Department's practices related to Telestaff, we identified several issues related to its development and configuration. For example:

- No parameter was created in the system to ensure that the maximum workday could not exceed 24 hours
- Potential cost was not a factor considered when the system assigned staff for overtime.
- Exception Reports had not been developed for management use
- Time adjustments and/or changes to Telestaff transactions could be made as much as a week after the transaction occurred.

In testing the system, we identified the following data accuracy issues within Telestaff:

- Hours worked as indicated by the system did not always accurately reflect the actual scheduled hours, or shift, worked; as indicated by the following:
  - Duplicate entries were made to the roster – changes made to the work schedule were not changed on the Telestaff system.
  - OT worked before or after normal work shift was not processed in Telestaff on the correct date.
  - When staffing changes were made because of an apparatus change the times were not changed on the Telestaff system.
  - When firefighters were scheduled to work and left because they were sick the times were not changed on Telestaff.
- Official City payroll and leave records did not always agree with the Telestaff system.

This situation appeared to have occurred for a number of reasons. When the City initially acquired the system, consideration was not given to including some of the aforementioned controls and exception reports. In addition, there were no documented procedures developed by management for the proper use of the Telestaff System. Also, the initial system training lasted only four hours and was given to only a few selected supervisors. These supervisors were supposed to train the rest of the staff. However, following this practice did not ensure that a majority of the users received the appropriate level of training. Finally, it did not appear that the City provided adequate technical support to the Fire Department during the initial system implementation.

The Fire Department's inability to utilize the Telestaff system to its fullest capacity could negatively impact the department's operational decision-making process, including its ability to accurately account for and monitor the work location of personnel and the ability to assist management with the filling of vacant positions and the control of overtime costs. Also, the continued existence of errors in the Telestaff database may compromise the accuracy of City payroll records as the cycle report produced by Telestaff for each firefighter was utilized by the Fire Department payroll area to verify that supporting documentation for all annual, sick leave and overtime was received by the payroll area.

**Recommendation - The Fire Department should reconfigure the Telestaff system and provide additional training, so that the system can be better utilized.**

The Fire Department should consider making adjustments to the system so that they will be able to better utilize the Telestaff system to its fullest capabilities. The following adjustments should be considered:

- Create parameters to ensure that a work day does not exceed 24 hours work day.
- Create parameters to consider salary costs when decisions are made related to assignment and scheduling of overtime.
- Develop exception reports for management review and monitoring of operations, such as overtime utilization, work exceeding 24 hours in a day, and Emergency Medical Services work hours.
- Close the system to staff-initiated time adjustments or changes after 24 hours, with management approval for any changes after that point.
- Create on-screen notifications of errors (with location) and edit reports for upper management.
- Retrain staff on consistent, and proper, use of Telestaff system with well documented departmental procedures.
- Train Telestaff programmer on Crystal software so that programming of management exception reports can be developed.

The City should also work with the Fire Department to provide adequate technical support for the system, to help ensure that optimal utilization is obtained.

**Response - The Telestaff system is currently utilized to automate and manage the staffing needs of the department. Daily staffing is currently managed by one of our on-duty Battalion Chiefs. On a daily basis, there are three Battalion Chiefs on duty. The Battalion Chief in this assignment acts as a Staffing Chief. In addition to the Fire Department's staffing responsibilities, this person is responsible for their daily administrative duties along with responding to emergency calls for service. He or she is responsible for initiating the system to staff all vacancies.**

**At the beginning of each pay cycle, the payroll history of all members is exported and printed out for verification of regular and overtime hours along with any leave usage for a particular time period. Currently, the aforementioned functions are standard practice throughout the department. We continue to devise an operational plan to provide greater accuracy in the field for our reporting purposes.**

**The training curriculum for the use of Telestaff is currently being reviewed. Standard procedures will be identified and training will include all members of the department. The Fire Department will also seek assistance from the City's Information Technology (IT) department for additional technical support. Currently, we are utilizing a Firefighter Specialist from our workforce to manage all fire department computer technologies. He has been assigned in this position under a temporary duty status since April 2002. The Telestaff's most important feature is its ability to make emergency notifications during natural and man-made disasters. The Department of Homeland Security approved the purchase and their grant provided the funding.**

## **2. Payroll**

**Finding – The Fire Department Payroll process needed to be enhanced. Supporting documentation was not always submitted in a timely manner. Discrepancies existed between forms received and entries processed on the Telestaff system, and the approval process for overtime forms was inconsistent.**

Payroll information and the supporting documentation should be accurate and received by the Fire Department Payroll Section in a timely manner with proper approval. In addition, the departmental payroll processes should be documented where appropriate, in the Administrative Regulations, Payroll Manual, Employee Handbook, and Fire Standard Operating Procedures. These procedures should address and establish minimum criteria for completing and processing payroll transactions and establish due dates for the receipt of transactions in the Fire Payroll Department.

We noted that supporting documentation for all types of leave and overtime was not being sent to the Fire Payroll Department in the pay period the leave or overtime occurred. The process for obtaining supporting documentation was not working effectively, creating numerous payroll record exceptions as listed below. In addition, the Fire Department did not have documented payroll procedures for processing sick leave, annual leave, military leave, and overtime. Our review of the payroll process and records within the Fire Payroll Department revealed the following:

- Proper and accurate payroll documents were not being received, as required, which created numerous payroll exceptions.
  - Cycle reports were not received by the Fire Payroll Department for all firefighters at the end of each cycle.
  - Oversight of the payroll process was inadequate for documenting leave and overtime. The timeliness of leave slips, overtime request forms, and other payroll documents was not enforced.
  - Payroll supporting documents for leave and overtime received by the Fire Payroll Department were not in agreement with Telestaff cycle reports.
  - Overtime forms were being approved, after the fact, by the Support Services Division Chief and not by an officer closer to the overtime event.
  - The payroll process was organized around the employee work cycle causing extra work to arrange the paperwork for a pay period and research exceptions.
  - The Fire Department Payroll Section spent an excessive amount of time tracking missing or late paperwork. This follow up, not only affected the payroll processors, but management, and the firefighter as well.
- Numerous overtime and leave forms that were received and processed by the department that were not reflected on the Telestaff cycle reports.
  - Overtime forms were received and processed but were not reflected on the Telestaff cycle reports.
  - Overtime forms reflected different hours than what was shown on the Telestaff cycle reports.
  - Telestaff cycle reports reflected many instances where sick leave was taken and no sick leave form was received for processing.
  - Annual leave forms were received for processing but the annual leave entry was not reflected on the Telestaff cycle reports.
  - Telestaff cycle reports reflected many instances where annual leave was taken and no annual leave form was received for processing.
  - Sick leave forms were received for processing but the sick leave entry was not reflected on the Telestaff cycle reports.
  - Overtime entries were found on the Telestaff cycle reports where no overtime forms were received or processed.
  - Sick leave was not being processed as it occurs when firefighters were out for an extended period of time but was often accumulated which necessitates the use of a Personnel Action form which accumulates the time and posts to the payroll system as a bulk hour adjustment.
- The process for obtaining department head approval for overtime forms was ineffective.
  - Overtime was paid for employee lunch hours.
  - Overtime forms were not properly completed and approved by the Support Services Division Chief, signatures were rubber stamped, overtime forms were not dated, and the appropriate approval boxes were not checked.
  - The payroll processes were not consistently handled from chief to chief and battalion to battalion.

The Support Services Division Chief was required to sign as authorized department head approver on each overtime form submitted for processing. We found that overtime forms were not properly completed and approved, overtime was paid prior to approval by the Support Services Division Chief, signatures were rubber stamped, overtime forms were not dated, and the appropriate approval boxes were not checked. The voluminous number of overtime forms that needed to be approved created a paperwork bottleneck at the Support Services Division Chief level.

The numerous payroll exceptions occurred because there was no oversight at the station level to ensure that supporting documentation for all types of leave and overtime was completed in a timely manner. The accuracy of the payroll supporting documentation was also affected by the lack of properly defined and enforced payroll procedures.

If the Fire Department does not revise payroll practices, supporting documentation will not be submitted in a timely manner and discrepancies will continue to exist between forms received and entries processed on the Telestaff system. Also, the approval process for overtime forms will remain inconsistent.

**Recommendation - The Fire Department should document internal payroll policy and procedures. Also, all supporting documentation for leave and overtime should be processed in the pay period in which it occurred.**

Payroll supporting documentation should be the responsibility of each firefighter. The station/battalion management should be accountable for the verification, accuracy, and completeness of payroll supporting documentation before it is forwarded to the Fire Payroll Department for processing. There should be designated individuals at each station and shift accountable for this function.

The following should also be considered:

- Established payroll policies and procedures should be enforced and monitored at all levels of management.
- The final department head overtime approval should be moved to the station/battalion management level and required prior to payment.
- All payroll supporting documentation for leave, overtime, and other payroll issues should be verified for accuracy and sent to Payroll by pay period. This can be accomplished by utilizing cycle/payroll reports produced by the Telestaff system at the station level.
- Establish payroll cut-off dates and require each firefighter, station chief, and battalion chief to turn in all paperwork for each pay period by required dates.

**Response - The Fire Department's payroll system is supported by 1.5 FTEs. With limited staff, we are experiencing time-consuming payroll processing and inaccuracy issues during data collection. Because payroll deadlines are prior to the end of each pay period, it is difficult at best to process leave and overtime within the pay period in which it has occurred. The Fire Department has requested an upgrade to our Part-Time Payroll position.**

**We have identified new payroll procedures to provide for more accuracy in documentation and to enhance our ability in meeting payroll deadlines. This new procedure will take affect on July 1, 2008. Identified in our new procedures are established cut-off dates to be on the 15<sup>th</sup> and 30<sup>th</sup> of each month. The collection of forms will give oversight and responsibility to the Firefighters, Company Officers, and Battalion Chiefs. Final approval for overtime, review for documented accuracy, and forms submissions to the Payroll Office will be conducted by the Battalion Chiefs.**

**In the near future, we hope Telestaff can provide us with the proper avenue to become paperless for our payroll needs. To better utilize this technology, the department has identified the need to collaborate with the City's Payroll Office, Human Resources and alongside with the City's Chief Information Officer to enhance our policies and procedures to better the Department's payroll requirements.**

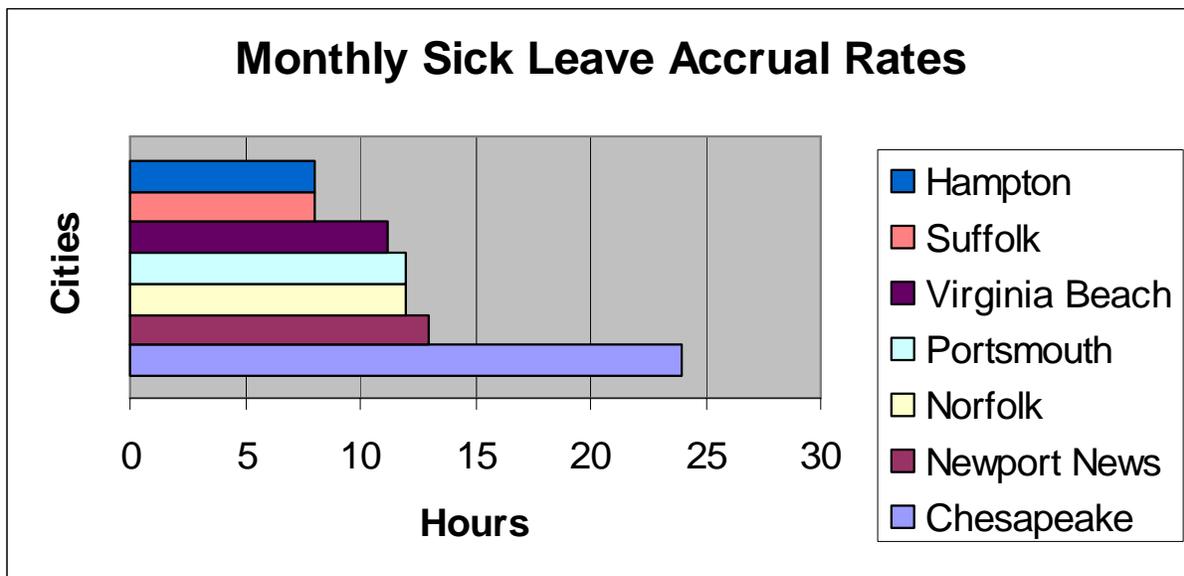
### 3. Sick Leave Accrual

**Finding - The accrual rate for sick leave for City firefighters was 24 hours a month. This rate was three times the sick leave accrual rate of regular City employees. Sick leave for regular employees was being accrued at 8 hours per month as defined in the City's Employee Handbook. The work day for sworn firefighters who work a 56-hour workweek was defined as 11.2 hours. In addition, the sick leave accrual rate was also two to two and one half times the accrual rate of other cities in this geographic area. The work day for firefighters was not adequately documented in the City's Human Resources Administrative Regulations and related policies.**

The City's Employee Handbook states that eligible full-time employees "...will accumulate sick leave at the rate of 8 hours per month..." An individual working a 40 hour workweek for the City would accrue 8 hours sick leave per month. Therefore, maintaining that same ratio, a firefighter working a 56-hour workweek would accrue 11.2 hours sick leave. The Personnel Department has defined a "work day" for 56 hour employees to be equal to 11.2 hours for the purpose of accruing annual leave

Chesapeake firefighters were accrued 24 hours of sick leave per month. This accrual rate for sick leave was not consistent with the 11.2 hours per month accrual rate for annual leave.

**Exhibit 6**



As Exhibit 6 indicates, the 24 hours per month of sick leave which Chesapeake firefighters were accruing was two to two and a half times the accrual rate of sick leave at most of the other cities in this geographic area. The Cities of Suffolk and Hampton accrued eight hours of sick leave per month. The City of Virginia Beach accrued 11.2 hours per month. The Cities of Portsmouth and Norfolk accrued 12 hours of sick leave per month. The City of Newport News accrued sick leave at a rate of 13 hours per month.

The 24-hour per month sick leave accrual rate was started in August 1978 as the result of an agreement between prior Fire and Human Resources Department management. The rate was based on the premise that if a firefighter was sick and missed a day of work, he or she was charged for 24 hours of sick leave. However, the 24-hour per month accrual rate did not recognize that firefighters only worked 10 days each month. Also, the agreement between the departments was never formalized as an Administrative Regulation.

The 24-hour per month accrual rate allows firefighters to receive sick leave benefits in a manner which is disproportionate in relation to other City employees. The higher accrual rate raises the City's cost, for sick leave and also causes sick leave payouts at retirement to be larger than necessary.

**Recommendations - The sick leave accrual rate for firefighters who work 56 hours per week should be defined to be one 11.2 hour work day per month rather than the current accrual of 24 hours per month. The agreement should also be formalized as an Administrative Regulation.**

The Fire Department and Human Resources should document policy in the Administrative Regulations, Payroll Manual, and the Employee Handbook, which establishes and defines the firefighters' sick leave accrual rate as one 11.2 hour work day per month and adequately defines the firefighters' who work 56 hours per week as having an 11.2 hour workday. If the City elects to provide more than 11.2 hours as a sick leave accrual rate for firefighters, such arrangement should also be formalized as an Administrative Regulation.

**Response – The sick leave accrual rate for firefighters who work 56 hours per week is defined as 24 hours for one day's leave per month. This rate was established in 1963 and has been in place since the Department's inception.**

In 1978, it was decided to convert annual leave accrual rates to reflect a correlation between a Firefighter's 56 hour work week and a 40 hour work week employee. Thus, in 1978, firefighters began to accrue annual leave based upon the ratio of 11.2 hours for one "day" of annual leave. Or as traditionally stated "11.2 hours is to 56 hours what 8 hours is to 40". This accrual rate for annual leave is still in effect today.

Conversely, in 1978, a decision was made to allow firefighter sick leave accrual rates to remain at the traditional 24 hour per day leave rate per month. The reason for this was several:

- The 24 hour sick leave accrual rate accurately reflects the firefighters need to take leave on a monthly basis from their date of hire. For example, comparing a newly hired firefighter with a new police officer or other City employee, if a firefighter were to accrue sick leave at the same 11.2 hour ratio as annual leave, they would have to work a full three months in order

to accrue sufficient sick leave to take off one shift or “day” (again 11.2 is to 56 what 8 is to 40). Hence, accruing annual leave at 11.2 hours per month takes a firefighter three months to accrue 33.6 hours of leave, which would then provide a sufficient balance to take a full 24 hour shift off. Conversely, a police officer or other 40 hour employee accrues sick leave at a rate of 8 hours per month, and is only charged 8 hours for a full shift (or “day”) off. As a result, they are able to take a full day off after the first month of employment. Maintaining sick leave accrual at the 24 hour rate permits firefighters to enjoy the same benefit of qualifying for one shift off should the need arise for sick leave after the first month of employment and provides a sense of balance between the two categories of employees.

- The 24 hour sick leave accrual rate is beneficial in attracting and retaining personnel. The United States Supreme Court has consistently ruled that firefighting is a “unique occupation” and allows employers to work firefighters an average of 53 hours per week before incurring an overtime liability. Conversely, the 40 hour employee only has to work 40 hours per week before an overtime liability is incurred. Thus, a firefighter works an average of 13 hours per week, or 52 hours per month more than their 40 hour counterpart without overtime compensation. The added 12.8 hours of sick leave accrual per month that firefighters earn above that of their 40 hour counterparts is still much less than the added 52 hours per month they are required to work before becoming eligible for overtime compensation. If the “uniqueness” in occupations that exists between firefighters and all other employees is sufficient to allow them to work 52 hours per month more before being eligible for overtime, then the same uniqueness should more than compensate as an offset for the slight difference in sick leave accrual rates that has existed since 1963.
- The irregular timing of firefighter work weeks can have a detrimental effect on firefighter leave balances over that of their 40 hour employee counterparts. Firefighters work an average of 56 hours per week in a three-week cycle, but actually work anywhere from 72 hours in the first week of their cycle to 48 hours in the last week. Hence, a firefighter having the unfortunate circumstance to be sick in the first week of their cycle will be charged 72 hours of sick leave, where their 40 hour counterpart would only be charged 40 hours. Even in the last week of their cycle, it would still cost them 48 hours which would be 8 hours more than the 40 hour employee. Thus, the current sick leave accrual rate helps to provide some type of offset for the negative impacts of that may occur due to irregular scheduling.

We recommend that the current firefighter sick leave accrual rate remain at the 24 hour rate, which reflects the uniqueness of the occupation and provides an offset to the peculiarities that result from irregular work weeks and dissimilar treatment between firefighters and 40 hour employees permitted by law.

#### **4. Overtime**

**Finding - Overtime increased by 15.4% from FY 2006 to FY 2007 and was over budget by \$1,743,952 for FY 2007 and \$1,969,977 for FY 2006. The Fire Department did not use cost as a factor in assigning overtime.**

Overtime usage should be managed by utilizing the tools available to monitor costs in order to avoid unnecessary and excessive expense. The Fire Department Telestaff system had the capability to track costs for each employee, and thus could produce information to help control them.

We noted that the City's Fire Department overtime expenditure for FY 2007 was \$2,858,727, an increase of 15.4% over the prior year. This amount exceeded the Department's FY 2007 overtime budget by \$1,743,952. We also noted that the Telestaff system was not providing accurate up-to-date information, and thus could not be used for real-time employee overtime cost decisions.

In addition to having a large number of vacancies this situation occurred because the Fire Department did not have adequate data to determine the optimum staff utilization. Thus, the cost of hire backs could not be tracked and a shortage of firefighters resulted in insufficient numbers of personnel to properly man the stations, creating excessive overtime.

Until adequate data is obtained, the Fire Department will likely continue to have difficulty managing overtime costs. If overtime costs are not appropriately managed, they will likely continue to escalate, resulting in continued cost overruns.

**Recommendation - The Fire Department should take steps to enhance its efforts to manage and control overtime costs.**

The Fire Department has increased its efforts to fill vacancies, graduating a class of 57 in January 2008. In addition, the Fire Department should consider the following items as they explore methods of controlling overtime costs.

- Hire sufficient number of firefighters to fill out the compliment.
- Utilize the Telestaff system to monitor and manage overtime usage.
- Develop various overtime exception reports to assist management in monitoring overtime.
- Consider replacement cost in determining selection order for hire back positions where appropriate.
- Utilize part time employees, such as Paramedics, to fill hire back positions.

**Response – There are many factors that contribute to overtime usage. Retirements, attrition, minimum staffing requirements, sick leave usage, annual leave usage, Military deployments, members on extended sick leave, temporary duty assignments to supplement the training staff for recruit academies, postponement of previously scheduled recruit schools are all contributing elements of staffing shortages.**

**A recurrence of vacancies over consecutive years has required the Fire Department to rely on overtime to maintain minimum staffing as directed by the Manager and Council. All of the single engine company fire stations have a staffing minimum of four firefighters and all of the multi-company fire stations must maintain a three firefighter minimum on each apparatus. Minimum staffing is a requirement which enhances firefighter safety, efficiency and our ability to meet the national standard outlined in the National Fire Protection Association (NFPA) 1710 standard. This standard contains minimum requirements relating to the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by substantially all career fire departments.**

**For a more comprehensive review of the overtime issue, please see Appendix B.**

## **D. Other Administrative and Operational Issues**

We noted that the Fire Department was not meeting the NFPA 1710 standard of arriving on the emergency scene within five minutes of ring down. Additionally, we noted that the donation account was not being handled correctly per Administrative Regulations. Finally, we observed that Hot Zone Enterprise had not been created properly in full compliance of IRS tax code, State Corporation Commission rules, and trademark regulations.

### **5. Response Time**

**Finding – The Fire Department was not able to meet the five minute first response time guideline promulgated by National Fire Protection Association Standard 1710 (NFPA 1710). In addition the existing twenty-year plan did not fully address the trend of the Fire Department toward increased EMS calls and decreased fire suppression calls, and only incrementally addressed the need to meet the NFPA 1710 requirement of a five minute first response time with full compliance in 2025.**

NFPA 1710 sets the requirement for EMS/Fire first response time at five minutes from ring down to arrival on the scene 90% of the time. The City of Chesapeake's Fire Department only met the five minute first response time as promulgated by NFPA 1710 37.1% of the time in FY 2005 and 33.5% of the time in FY 2006. The existing Fire Department plan called for meeting the five minute goal by 2025.

The Fire Department had not established a process of interim goals in order to assist management in achieving the five minute response time. Also, this plan did not appear to adequately address how to handle the increasing volume of EMS calls. EMS incidents increased by 24.46% from FY 2001 to FY 2007 while fire calls decreased by 16.27% over the same period. There was no systemic process in place for documenting why calls were not meeting the five minute first response time.

This situation occurred because the Fire Department did not have sufficient financial resources to meet NFPA standards. In addition, historical statistical data was not being utilized as the basis for decisions regarding the achievement of a five minute first response time. Additionally, there appears to have been a lack of understanding as to the reasons behind why the five minute first response time was not being met. There was a lack of statistical data, and analysis, on response times, costs, causes, and trends which limited management's ability to plan and predict systemic changes.

If the Fire Department does not change to a data driven approach in the future, it will be difficult to justify increased expenditures for professional Fire and EMS service delivery to citizens. As a result the level of service will not continue to improve or reach the five minute response time.

**Recommendations - The Fire Department should develop a comprehensive action plan that illustrates how it plans to achieve this goal of a five minute first response time.**

In order to facilitate achievement of this goal management should consider the following methods to help make the delivery of EMS' and Fire services more effective and efficient:

1. Identify ways to improve the delivery of services.
2. Determine the costs of delivering services, such as fuel consumption per call, manpower usage ratios, time spent on calls and time spent in down status, for EMS and Fire.
3. Gather statistical data on response times.
4. Set interim response time goals for City of Chesapeake.
5. Determine and document reasons why response times are not met.
6. Implement an automated Pre-Hospital Patient Care Report system.
7. Obtain access to the Smart Traffic Center monitoring system to aid 911 Dispatch.
8. Obtain mobile data units with GPS/GIS and CAD tie in.
9. Utilize GPS aided dispatch.
10. Out source non-emergency services or provide smaller units whose major responsibility is to transport citizens to the hospital.
11. Assign paramedics to the hospital emergency room so EMS units can transfer patients to them and return to available status faster.
12. Establish dedicated hospital personnel to facilitate the prompt and efficient processing of EMS delivered patients.
13. Implement the use of mobile EMS (paramedic) "zone" cars.
14. Reevaluate the 20 Year Plan to better reflect the increased EMS call volume.
15. Change from the traditional 24 hour shift to other shift configurations and establish power shifts to take advantage of fluctuations in call volume.
16. Restrict the number of hours firefighters can work EMS to a maximum of twelve hours in a shift.
17. Establish EMS only stations.

**Response – The Fire Department is committed to achieve the goals established in the NFPA 1710 standard. However, due to the intricacy of the NFPA 1710's response time requirement, the Fire Department would have to increase its complement of personnel, apparatus, and fire stations. There are some fire station locations that make it geographically impossible to achieve the response goals of the NFPA 1710 standard. The Fire Department recommended a Long-Range Plan to City Council in 2005. This plan includes incremental accompaniments of fire station relocations, new fire stations, personnel, fire apparatus and medic units. Due to the high cost of the entire plan, the Fire Department was advised to create a plan that was incremental. Thus, the plan encompasses 20 years.**

**We have developed many programs in efforts to be a more responsive department. We have set internal goals in becoming more efficient, improving response times, and improving service delivery. Technology, knowledge management, and process changes have identified a need for many program implementations. As a progressive Fire Department, technology and identifying efficient practices to provide services to our citizens is an integral part of the Fire Department philosophy. We have created many task forces to identify technological advances within the fire service to provide improved services. We have established the need for mobile data terminals and automated Pre-Hospital Patient Care Report system. The Pre-Hospital Patient Care Report system is approaching full implementation.**

**Mobile data terminals were research in 2004. This program revealed a high financial cost that was unobtainable by the Fire Department. During this same time grant applications for MDTs proved to be unsuccessful. In the near future, communication interoperability within the region will afford the Fire Department with an opportunity for mobile data terminals. The current program is spear-headed through the Statewide Communications Interoperability Plan. The current system poses a few site limitations. The expansion of this system continues to grow. This project is also known as the Overlay Regional Interoperability Network (ORION).**

**An automated Pre-Hospital Patient Care Report system has not been completely implemented. During July 2007, we obtained the hardware to outfit our response equipment with computer data terminals. However, full implementation has been delayed due to software incompatibilities with CAD and the new hardware. We have been collaborating with Information Technology (IT), the Police Department, Tiburon, and Roam to assist us in completing a full execution of this program.**

**At the end of year 2007, the Fire Department completed an extensive pilot program that addressed our EMS deployment efficiencies and response times. In this plan we outlined a movement of certain certified personnel between medic units and fire apparatus. This would better distribute our responding resources.**

**Also identified were dispatch enhancements, zone car implementation, additional personnel and non-emergency transport units (NETcare) as an all inclusive package to redefine our deployment of resources. Highlights of this program were presented during our January 2008 budget hearing. The final plan is currently being finalized to be presented to the City Manager.**

**In an effort to decrease turn around time at Chesapeake General Hospital, the Fire Department maintains and open line of communication with our Operational Medical Director, Dr. Segal. Our Medical Operations Chief, Dan Fermil coordinates the EMS delivery system for the Fire Department. He continues to work with Dr. Segal in addressing our delays in patient/hospital transfer delays. Due to a high workload for hospital ER staff, numerous delays were identified.**

**These delays created extended hospital turn around times. A joint task force was established with the Fire Department and Chesapeake General Hospital to identify the feasibility of hiring a Paramedic to assist in patient transfers. The final outcome identified internal changes to the Chesapeake General ER operations. These adjustments to their system currently provides for an enhanced ability to clear our medic units in a timely manner.**

**All of these programs bring substantial rewards in improving response times and service delivery. Some of the programs have been limited to financial constraints and others are work in progress. The Fire Department will continue to strive to deliver a premier service to the citizens of Chesapeake.**

## **6. Donation Account**

**Finding - The donation account was not being used as originally intended. Funds were not endorsed and deposited immediately upon receipt, cash receipt and cash disbursement journals were not being maintained, and the account has not been reconciled monthly.**

Donation accounts should be maintained in accordance with Administration Regulation number 2.01. This regulation requires that cash receipt and disbursement journals be maintained, copies of all donation checks be made, and bank statements reconciled monthly.

We noted that the donation general ledger account was not always used in accordance with the Administrative regulations. In several instances reimbursements for items unrelated to donations were deposited into the donation account rather than the appropriate City account. We also noted that three Hampton Roads Metropolitan Medical Reserve Services grants of \$10,000, \$5,000 and \$7,500 respectively, were placed in the account in June and December 2006. In addition, donation checks were not being endorsed and deposited timely upon receipt. Cash receipts and disbursement journals were not maintained, documentation was not kept to support all transactions or allow for adequate review and the account had not been reconciled since July 2005.

These transactions were processed into this account due to a lack of understanding as to how to handle them. Also, because staff was not adequately trained on the PeopleSoft system, transactions stayed in the account for extended periods. In addition, a misunderstanding of written Finance Department procedure led the Fire Department to discontinue subsidiary accounts and reconciliations.

Because of these practices, the donation account was not properly maintained. In addition, inappropriate deposits into the account increased the risk of misuse of these funds.

**Recommendation - The donation account should only be used for donations. Supporting documentation should be maintained for all transactions. The donation account should be reconciled on a monthly basis.**

The following corrective actions should be considered:

- The donation account should only be used for donations and not used for grant funds or for reimbursement of expense funds.
- The Finance Department should be contacted to set up special People Soft training for Fire Department Administrative personnel.
- Disbursement and receipt journals should be maintained.
- Copies of checks/cash received should be made and date stamped.
- Supporting documentation should be on file for all transactions.
- Checks/cash should be deposited on the date of receipt.
- The donation account should be reconciled each month.
- The Fire Department should monitor and review the donation account process to ensure that documentation is adequate, funds received are properly endorsed, and controlled, until deposited, and that the account is reconciled monthly.

**Response - In the past, the City disposed of the deferred accounts in the mainframe and created a "donations" account in PeopleSoft. We were told to use the account in the same manner as the deferred account. Therefore, we continued to include refunds and reimbursements. Much later a recovery and rebates account was established to deposit these funds and segregate them from the donations. Deposits were made as batches and not on a daily basis. This has been corrected and deposits are made when a payment is received. A monthly reconciliation is now part of the closing process.**

**Additionally, we are now required to appropriate all donations, refunds and reimbursements. Paperwork was submitted to Finance in order to have all deposits appropriated at the end of last fiscal year. We will compile a list with copies of the deposits for this fiscal year and request an appropriation for those funds. Beginning next fiscal year we will request our appropriations quarterly.**

**7. Review of the Public Access Defibrillator (PAD) Program at the City Hall Building**

**Finding – The list of Access Emergency Defibrillator (AED) Operators at the City Hall building was not current, contact numbers were not listed, and several AED Operators’ listed had not been recertified. In addition, the equipment was not being tested in accordance with the Fire Departments Standard Operating Procedures.**

The Public Access Defibrillation (PAD) program was designed to provide access to early defibrillation and prompt cardiopulmonary resuscitation (CPR) by laypersons (AED operators) until the arrival of 911 emergency personnel. This program increased the survivability of an individual in the event of a cardiac arrest occurrence. The Chesapeake Fire Department was responsible for the coordination, quality assurance, and maintenance of equipment, record keeping and training of Public Access Defibrillation within the City. The implementation of this program provided employees and citizens an extra chance of survival in the event of a cardiac emergency. It should also be pointed out that the AED operators are individuals who volunteered to provide this service to our employees and citizens.

**Exhibit 7**

<b>FLOOR</b>	<b>PAD LOCATION</b>	<b># AED OPERATOR ASSIGNED</b>	<b># AED OPERATORS REMAINING</b>	<b># AED OPERATORS NEEDING RETRAINING</b>
1 <sup>st</sup>	YES	2	2	2
2 <sup>nd</sup>	NO	3	1	0
3 <sup>rd</sup>	YES	4	1	1
4 <sup>th</sup>	NO	1	0	0
5 <sup>th</sup>	YES	0	0	0
6 <sup>th</sup>	NO	0	0	0
<b>TOTAL</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>3</b>

Our review of the PAD Program at the headquarters building revealed the following:

- The current list of AED Operators (See Exhibit 7) was dated December 11, 2001. Six (6) of the ten (10) AED Operators on the list no longer worked at City Hall and three (3) of the four (4) remaining AED operators listed needed to be recertified.
- The list of AED Operators was located only on the first floor of City Hall and was not located at each PAD location within the building. In addition, the list did not include phone numbers of the AED Operators nor did it indicate what steps needed to be taken in the event of a cardiac emergency.
- The 5<sup>th</sup> floor had PAD equipment but did not have an AED Operator assigned on that floor.

- PAD equipment was not located on each floor. The PAD equipment was only located on 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> floors of the City Hall building. The 2<sup>nd</sup> and 6<sup>th</sup> floors did not have PAD equipment and there were no directions or information as to where PAD equipment was located and what should be done in the case of a cardiac emergency.
- Policy and procedures for the PAD program are not currently being adhered to. Current Policy required that PAD equipment be tested each day and that AED operators be recertified every two years.
- A notebook containing the Fire Department Policies related to PAD program was located at each PAD location.

This situation occurred due to the high turnover of volunteers, no follow up to ensure training/certification for volunteers was kept current and not making periodic site visits to PAD locations to ensure volunteers contact information was kept current.

The purpose of the PAD program when put in place was to give citizens and employees a greater chance of survival in the event of a cardiac emergency. However, if a cardiac emergency occurred and no one knew where PAD's were located, who to contact, how to contact AED operators, and have instructions on what to do in the event of a cardiac emergency this would defeat the purpose of having the PAD program.

**Recommendation – The Fire Department should ensure that the PAD program is monitored and is operating in accordance with Fire Department Standard Operating Procedures. In addition, we recommend that all buildings and departments where PAD units were placed be reviewed to ensure the lists of AED operators contain current information that AED operators have been recertified.**

The following issues needed to be addressed with regard to the PAD Program:

- Fire policies and procedures need to be updated to incorporate current operating practices.
- Consideration should be given to developing a quick reference guide which outlines what steps need to be taken in case of a cardiac emergency.
- Consideration should be given to having AED operators work on the same floor as the PAD units.
- A current list of trained AED operators should be maintained at all time. The list should include the following information: name of AED operator, phone number of AED operator, and the floor the AED is located and the floor the PAD unit is located. The list of AED operators should be located at each PAD unit for easy access in the event of a cardiac emergency.
- The list of trained AED operators should be reviewed on a quarterly basis to ensure the information on the list is accurate.
- Periodic testing of PAD units should be performed as required by Fire Standard Operating Procedures. Management should ensure that testing of PAD units is performed as required by policy.
- The Fire Department should ensure that all AED operators were recertified at least every two years.

- Consideration should be given to providing periodic training for all employees in the City Hall building regarding the PAD Program. This would include where the PAD units were located and provide a quick reference guide for the program so that employees knew what to do in the event of an emergency.
- Consideration should be given to locating a PAD unit on each floor of the headquarters building.

**Response – A revision to the Standard Operating Procedure for the Fire Department’s PAD Program has been completed. This standard operating procedure outlines the processes for training, recertification, equipment maintenance and testing, and Fire Department integration.**

A Field Medical Officer (FMO) with the Fire Department has been designated as Program Manager. His duties are to maintain proper training and recertification, maintenance and repair, inventory, and record keeping. He is listed as the point of contact. All documentation is currently being reviewed for updates. These duties are in addition to the normal responsibilities of the FMO. The FMO is responsible for emergency response to calls for service, supervision of medical care, and oversight of all patient care documentation.

#### **8. Hot Zone Enterprise**

**Finding - Our test of the records revealed that Hot Zone Enterprise was not legally established as a not-for-profit entity.**

Hot Zone Enterprise should comply with the IRS tax code, State Corporation Commission rules, and trademark regulations in the establishment and operation of the Hot Zone Enterprises.

Hot Zone Enterprise’s proper legal status could not be verified as far as usage of proper tax identification numbers, not-for-profit status, and trade mark documentation. Hot Zone Enterprise was a purported not for profit, fund raising enterprise, that supports the morale and recreational activities of the fire fighters, paramedics, and their families.

This situation existed because there was a lack of understanding as to the proper manner in which to create a not-for-profit entity. If this account was not properly handled there could be potential violations of the IRS tax code, State Corporation Commission rules, and trademark infringements.

**Recommendation - The Fire Department should ensure Hot Zone Enterprise’s compliance with the IRS tax code, State Corporation Commission rules, and trademark regulations.**

Since it was clearly the intent of the Fire Department organizers to have Hot Zone Enterprise as a not-for-profit entity, steps should be taken to ensure that the entity is properly created. These steps should include obtaining (501)(C)(3) status from the IRS, and complying with State Corporation Commission and Trademark requirements.

**Response - The Hot Zone is a not-for-profit fund raising enterprise that supports the Morale and Recreation activities for the firefighters, paramedics, civilian support staff and their families. One-hundred percent of the donations are used to fund special events such as the Family Picnic Day, the Annual Retirement Dinner, and the Christmas Parade Cook-out.**

**The current Hot Zone account was established after collaborating with our City Treasurer's Office.**

**In light of the information found in this report, it appears that the Hot Zone Enterprise should be created as a stand alone non-profit entity. The Fire Department will work together with the City Attorney's Office to insure our activity complies with all applicable City regulations to include compliance with State and Federal laws.**

# **APPENDIX A**

## **RESPONSE FROM CHESAPEAKE FIRE DEPARTMENT OFFICIALS**

**Chesapeake Fire Department**  
**City Audit Responses**

**May 27, 2008**

## **1. Telestaff System**

Finding – The Fire Department was not utilizing the Telestaff system to its optimal capacity.

Recommendation - The Fire Department should reconfigure the Telestaff system and provide additional training, so that the system can be better utilized.

**Response - The Telestaff system is currently utilized to automate and manage the staffing needs of the department. Daily staffing is currently managed by one of our on-duty Battalion Chiefs. On a daily basis, there are three Battalion Chiefs on duty. The Battalion Chief in this assignment acts as a Staffing Chief. In addition to the Fire Department's staffing responsibilities, this person is responsible for their daily administrative duties along with responding to emergency calls for service. He or she is responsible for initiating the system to staff all vacancies.**

At the beginning of each pay cycle, the payroll history of all members is exported and printed out for verification of regular and overtime hours along with any leave usage for a particular time period. Currently, the aforementioned functions are standard practice throughout the department. We continue to devise an operational plan to provide greater accuracy in the field for our reporting purposes.

The training curriculum for the use of Telestaff is currently being reviewed. Standard procedures will be identified and training will include all members of the department. The Fire Department will also seek assistance from the City's Information Technology (IT) department for additional technical support. Currently, we are utilizing a Firefighter Specialist from our workforce to manage all fire department computer technologies. He has been assigned in this position under a temporary duty status since April 2002. The Telestaff's most important feature is its ability to make emergency notifications during natural and man-made disasters. The Department of Homeland Security approved the purchase and their grant provided the funding.

## **2. Payroll**

Finding – The Fire Department Payroll process needed to be enhanced. Supporting documentation was not always submitted in a timely manner. Discrepancies existed between forms received and entries processed on the Telestaff system, and the approval process for overtime forms was inconsistent.

Recommendation - The Fire Department should document internal payroll policy and procedures. Also, all supporting documentation for leave and overtime should be processed in the pay period in which it occurred.

**Response - The Fire Department's payroll system is supported by 1.5 FTEs. With limited staff, we are experiencing time-consuming payroll processing and inaccuracy issues during data collection. Because payroll deadlines are prior to the end of each pay period, it is difficult at best to process leave and overtime within the pay period in which it has occurred. The Fire Department has requested an upgrade to our Part-Time Payroll position.**

**We have identified new payroll procedures to provide for more accuracy in documentation and to enhance our ability in meeting payroll deadlines. This new procedure will take effect on July 1, 2008. Identified in our new procedures are established cut-off dates to be on the 15<sup>th</sup> and 30<sup>th</sup> of each month. The collection of forms will give oversight and responsibility to the Firefighters, Company Officers, and Battalion Chiefs. Final approval for overtime, review for documented accuracy, and forms submissions to the Payroll Office will be conducted by the Battalion Chiefs.**

**In the near future, we hope Telestaff can provide us with the proper avenue to become paperless for our payroll needs. To better utilize this technology, the department has identified the need to collaborate with the City's Payroll Office, Human Resources and alongside with the City's Chief Information Officer to enhance our policies and procedures to better the Department's payroll requirements.**

### **3. Sick Leave Accrual**

**Finding - The accrual rate for sick leave for City firefighters was 24 hours a month. This rate was three times the sick leave accrual rate of regular City employees. Sick leave for regular employees was being accrued at 8 hours per month as defined in the City's Employee Handbook. The work day for sworn firefighters who work a 56- hour workweek was defined as 11.2 hours. In addition, the sick leave accrual rate was also two to two and one half times the accrual rate of other cities in this geographic area. The work day for firefighters was not adequately documented in the City's Human Resources Administrative Regulations and related policies.**

**Recommendations - The sick leave accrual rate for firefighters who work 56 hours per week should be defined to be one 11.2 hour work day per month rather than the current accrual of 24 hours per month. The agreement should also be formalized as an Administrative Regulation.**

**Response – The sick leave accrual rate for firefighters who work 56 hours per week is defined as 24 hours for one day's leave per month. This rate was established in 1963 and has been in place since the Department's inception.**

**In 1978, it was decided to convert annual leave accrual rates to reflect a correlation between a Firefighter's 56 hour work week and a 40 hour work week employee. Thus, in 1978, firefighters began to accrue annual leave based upon**

the ratio of 11.2 hours for one “day” of annual leave. Or as traditionally stated “11.2 hours is to 56 hours what 8 hours is to 40”. This accrual rate for annual leave is still in effect today.

Conversely, in 1978, a decision was made to allow firefighter sick leave accrual rates to remain at the traditional 24 hour per day leave rate per month. The reason for this was several:

- The 24 hour sick leave accrual rate accurately reflects the firefighters need to take leave on a monthly basis from their date of hire. For example, comparing a newly hired firefighter with a new police officer or other City employee, if a firefighter were to accrue sick leave at the same 11.2 hour ratio as annual leave, they would have to work a full three months in order to accrue sufficient sick leave to take off one shift or “day” (again 11.2 is to 56 what 8 is to 40). Hence, accruing annual leave at 11.2 hours per month takes a firefighter three months to accrue 33.6 hours of leave, which would then provide a sufficient balance to take a full 24 hour shift off. Conversely, a police officer or other 40 hour employee accrues sick leave at a rate of 8 hours per month, and is only charged 8 hours for a full shift (or “day”) off. As a result, they are able to take a full day off after the first month of employment. Maintaining sick leave accrual at the 24 hour rate permits firefighters to enjoy the same benefit of qualifying for one shift off should the need arise for sick leave after the first month of employment and provides a sense of balance between the two categories of employees.
- The 24 hour sick leave accrual rate is beneficial in attracting and retaining personnel. The United States Supreme Court has consistently ruled that firefighting is a “unique occupation” and allows employers to work firefighters an average of 53 hours per week before incurring an overtime liability. Conversely, the 40 hour employee only has to work 40 hours per week before an overtime liability is incurred. Thus, a firefighter works an average of 13 hours per week, or 52 hours per month more than their 40 hour counterpart without overtime compensation. The added 12.8 hours of sick leave accrual per month that firefighters earn above that of their 40 hour counterparts is still much less than the added 52 hours per month they are required to work before becoming eligible for overtime compensation. If the “uniqueness” in occupations that exists between firefighters and all other employees is sufficient to allow them to work 52 hours per month more before being eligible for overtime, then the same uniqueness should more than compensate as an offset for the slight difference in sick leave accrual rates that has existed since 1963.
- The irregular timing of firefighter work weeks can have a detrimental effect on firefighter leave balances over that of their 40 hour employee counterparts. Firefighters work an average of 56 hours per week in a three-week cycle, but actually work anywhere from 72 hours in the first week of

**their cycle to 48 hours in the last week. Hence, a firefighter having the unfortunate circumstance to be sick in the first week of their cycle will be charged 72 hours of sick leave, where their 40 hour counterpart would only be charged 40 hours. Even in the last week of their cycle, it would still cost them 48 hours which would be 8 hours more than the 40 hour employee. Thus, the current sick leave accrual rate helps to provide some type of offset for the negative impacts of that may occur due to irregular scheduling.**

**We recommend that the current firefighter sick leave accrual rate remain at the 24 hour rate, which reflects the uniqueness of the occupation and provides an offset to the peculiarities that result from irregular work weeks and dissimilar treatment between firefighters and 40 hour employees permitted by law.**

#### **4. Overtime**

Finding - Overtime increased by 15.4% from FY 2006 to FY 2007 and was over budget by \$1,743,952 for FY 2007 and \$1,969,977 for FY 2006. The Fire Department did not use cost as a factor in assigning overtime.

Recommendation - The Fire Department should take steps to enhance its efforts to manage and control overtime costs.

**Response – There are many factors that contribute to overtime usage. Retirements, attrition, minimum staffing requirements, sick leave usage, annual leave usage, Military deployments, members on extended sick leave, temporary duty assignments to supplement the training staff for recruit academies, postponement of previously scheduled recruit schools are all contributing elements of staffing shortages.**

**A recurrence of vacancies over consecutive years has required the Fire Department to rely on overtime to maintain minimum staffing as directed by the Manager and Council. All of the single engine company fire stations have a staffing minimum of four firefighters and all of the multi-company fire stations must maintain a three firefighter minimum on each apparatus. Minimum staffing is a requirement which enhances firefighter safety, efficiency and our ability to meet the national standard outlined in the National Fire Protection Association (NFPA) 1710 standard. This standard contains minimum requirements relating to the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by substantially all career fire departments.**

**For a more comprehensive review of the overtime issue, please see Appendix B.**

## **D. Other Administrative and Operational Issues**

### **5. Response Time**

Finding – The Fire Department was not able to meet the five minute first response time guideline promulgated by National Fire Protection Association Standard 1710 (NFPA 1710). In addition the existing twenty-year plan did not fully address the trend of the Fire Department toward increased EMS calls and decreased fire suppression calls, and only incrementally addressed the need to meet the NFPA 1710 requirement of a five minute first response time with full compliance in 2025.

Recommendations - The Fire Department should develop a comprehensive action plan that illustrates how it plans to achieve this goal of a five minute first response time.

**Response – The Fire Department is committed to achieve the goals established in the NFPA 1710 standard. However, due to the intricacy of the NFPA 1710's response time requirement, the Fire Department would have to increase its complement of personnel, apparatus, and fire stations. There are some fire station locations that make it geographically impossible to achieve the response goals of the NFPA 1710 standard. The Fire Department recommended a Long-Range Plan to City Council in 2005. This plan includes incremental accompaniments of fire station relocations, new fire stations, personnel, fire apparatus and medic units. Due to the high cost of the entire plan, the Fire Department was advised to create a plan that was incremental. Thus, the plan encompasses 20 years.**

**We have developed many programs in efforts to be a more responsive department. We have set internal goals in becoming more efficient, improving response times, and improving service delivery. Technology, knowledge management, and process changes have identified a need for many program implementations. As a progressive Fire Department, technology and identifying efficient practices to provide services to our citizens is an integral part of the Fire Department philosophy. We have created many task forces to identify technological advances within the fire service to provide improved services. We have established the need for mobile data terminals and automated Pre-Hospital Patient Care Report system. The Pre-Hospital Patient Care Report system is approaching full implementation.**

**Mobile data terminals were research in 2004. This program revealed a high financial cost that was unobtainable by the Fire Department. During this same time grant applications for MDTs proved to be unsuccessful. In the near future, communication interoperability within the region will afford the Fire Department with an opportunity for mobile data terminals. The current program is spear-headed through the Statewide Communications Interoperability Plan. The current system poses a few site limitations. The expansion of this system continues to**

grow. This project is also known as the Overlay Regional Interoperability Network (ORION).

An automated Pre-Hospital Patient Care Report system has not been completely implemented. During July 2007, we obtained the hardware to outfit our response equipment with computer data terminals. However, full implementation has been delayed due to software incompatibilities with CAD and the new hardware. We have been collaborating with Information Technology (IT), the Police Department, Tiburon, and Roam to assist us in completing a full execution of this program.

At the end of year 2007, the Fire Department completed an extensive pilot program that addressed our EMS deployment efficiencies and response times. In this plan we outlined a movement of certain certified personnel between medic units and fire apparatus. This would better distribute our responding resources. Also identified were dispatch enhancements, zone car implementation, additional personnel and non-emergency transport units (NETcare) as an all inclusive package to redefine our deployment of resources. Highlights of this program were presented during our January 2008 budget hearing. The final plan is currently being finalized to be presented to the City Manager.

In an effort to decrease turn around time at Chesapeake General Hospital, the Fire Department maintains an open line of communication with our Operational Medical Director, Dr. Segal. Our Medical Operations Chief, Dan Fermil coordinates the EMS delivery system for the Fire Department. He continues to work with Dr. Segal in addressing our delays in patient/hospital transfer delays. Due to a high workload for hospital ER staff, numerous delays were identified. These delays created extended hospital turn around times. A joint task force was established with the Fire Department and Chesapeake General Hospital to identify the feasibility of hiring a Paramedic to assist in patient transfers. The final outcome identified internal changes to the Chesapeake General ER operations. These adjustments to their system currently provides for an enhanced ability to clear our medic units in a timely manner.

All of these programs bring substantial rewards in improving response times and service delivery. Some of the programs have been limited to financial constraints and others are work in progress. The Fire Department will continue to strive to deliver a premier service to the citizens of Chesapeake.

## **6. Donation Account**

Finding - The donation account was not being used as originally intended. Funds were not endorsed and deposited immediately upon receipt, cash receipt and cash disbursement journals were not being maintained, and the account has not been reconciled monthly.

Recommendation - The donation account should only be used for donations. Supporting documentation should be maintained for all transactions. The donation account should be reconciled on a monthly basis.

**Response - In the past, the City disposed of the deferred accounts in the mainframe and created a "donations" account in PeopleSoft. We were told to use the account in the same manner as the deferred account. Therefore, we continued to include refunds and reimbursements. Much later a recovery and rebates account was established to deposit these funds and segregate them from the donations. Deposits were made as batches and not on a daily basis. This has been corrected and deposits are made when a payment is received. A monthly reconciliation is now part of the closing process.**

**Additionally, we are now required to appropriate all donations, refunds and reimbursements. Paperwork was submitted to Finance in order to have all deposits appropriated at the end of last fiscal year. We will compile a list with copies of the deposits for this fiscal year and request an appropriation for those funds. Beginning next fiscal year we will request our appropriations quarterly.**

#### **7. Review of the Public Access Defibrillator (PAD) Program at the City Hall Building**

Finding – The list of Access Emergency Defibrillator (AED) Operators at the City Hall building was not current, contact numbers were not listed, and several AED Operators' listed had not been recertified. In addition, the equipment was not being tested in accordance with the Fire Departments Standard Operating Procedures.

Recommendation – The Fire Department should ensure that the PAD program is monitored and is operating in accordance with Fire Department Standard Operating Procedures. In addition, we recommend that all buildings and departments where PAD units were placed be reviewed to ensure the lists of AED operators contain current information that AED operators have been recertified.

**Response – A revision to the Standard Operating Procedure for the Fire Department's PAD Program has been completed. This standard operating procedure outlines the processes for training, recertification, equipment maintenance and testing, and Fire Department integration.**

**A Field Medical Officer (FMO) with the Fire Department has been designated as Program Manager. His duties are to maintain proper training and recertification, maintenance and repair, inventory, and record keeping. He is listed as the point of contact. All documentation is currently being reviewed for updates. These duties are in addition to the normal responsibilities of the FMO. The FMO is responsible for emergency response to calls for service, supervision of medical care, and oversight of all patient care documentation.**

## **8. Hot Zone Enterprise**

Finding - Our test of the records revealed that Hot Zone Enterprise was not legally established as a not-for-profit entity.

Recommendation - The Fire Department should ensure Hot Zone Enterprise's compliance with the IRS tax code, State Corporation Commission rules, and trademark regulations.

**Response - The Hot Zone is a not-for-profit fund raising enterprise that supports the Morale and Recreation activities for the firefighters, paramedics, civilian support staff and their families. One-hundred percent of the donations are used to fund special events such as the Family Picnic Day, the Annual Retirement Dinner, and the Christmas Parade Cook-out.**

The current Hot Zone account was established after collaborating with our City Treasurer's Office.

In light of the information found in this report, it appears that the Hot Zone Enterprise should be created as a stand alone non-profit entity. The Fire Department will work together with the City Attorney's Office to insure our activity complies with all applicable City regulations to include compliance with State and Federal laws.

# **APPENDIX B**

## **OVERTIME STUDY FROM CHESAPEAKE FIRE DEPARTMENT OFFICIALS**

## Executive Summary

The increase in the Fire Department overtime expenses is primarily due to a rise in attrition, vacancies and the mandate to maintain minimum staffing levels. Diminished staffing levels are caused, in part, by lack of consistent recruit classes, retirements, sick leave, extended sick leave, military leave, attrition, temporary duty assignments, mandated training, and difficulty projecting anticipated retirements. They have been exacerbated by an increase in daily absentee rates. Because the department must maintain a daily minimum staffing of firefighters, any absence that drops the department below this minimum staffing requirement creates a need for overtime. An off-duty firefighter must be hired back to fill the vacant position. Fire Department overtime is comprised of 12 hour and 24 hour shifts. Twelve hours is called a half of a shift. Twenty-four hours is a whole shift. When a fire fighter misses a 24-hour shift for any reason this creates a vacancy for up to 24 hours. A hire back limitation to our staffing numbers is the 36 hour rule. No firefighter is permitted to work more than 36 consecutive hours.

The information contained in this document illustrates an accrual of vacancies affecting the Fire Department from 2005 to 2008 along with a detailed look into the drivers of overtime. This data shows the continuous cycle of vacancies which result in months of extraordinary dependence on overtime to maintain minimum staffing. Each month with at least one separated employee is clearly marked with a number. The starting point of each timeline notes the number of unfilled seats at the beginning of the year. There were three employees who returned as re-hires. At the end of each scale a note references the total number of separations for that year. The terminology for an “unfilled seat” denotes either a true vacancy or a Recruit in the Academy where the person cannot be utilized for minimum staffing.

The number of fire fighters available for suppression has declined in recent years because of retirements and failures to fill vacancies in a timely manner. The Fire Department did not have a recruit school in 2005. This was due to a Justice Department investigation which involved the entrance test. This issue has been resolved.

The greatest increases in absenteeism were due to firefighters retiring, resigning, on long-term sick leave, regular sick leave, and using annual leave.

There are other contributing factors to overtime usage. Long term sick leave, daily sick leave, annual leave, recruit academies, temporary duty assignments, retirements, attrition, military leave, conferences, mandated training, and administrative overtime. Three year statistics are included in this document. With a mandated minimum staffing level and below minimum staffing, daily drivers of overtime have become magnified.

# Overtime Drivers



## Vacancy Timeline 2005

### Number of Employees Separated from Employment

The Fire Department had 18 vacancies as of January 1, 2005.

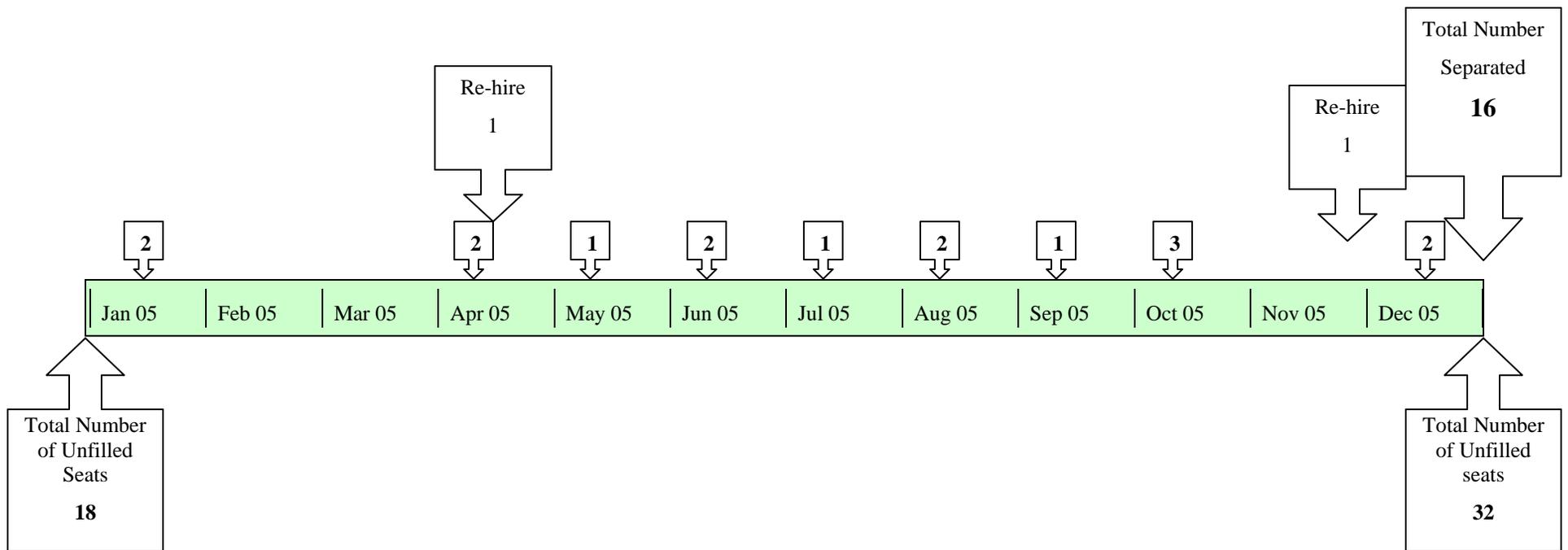
There were two re-hired firefighters.

A Justice Department investigation prevented a hiring process in 2005.

There was no Recruit Academy during this year.

There were 16 firefighters who separated employment in 2005. (7 retired & 9 resigned)

Natural disasters in late 2005 created vacancies in staffing due to FEMA deployments. (*Hurricanes Dennis, Katrina, Ophelia, Rita, and Wilma*)



# Vacancy Timeline 2006

## Number of Employees Separated from Employment

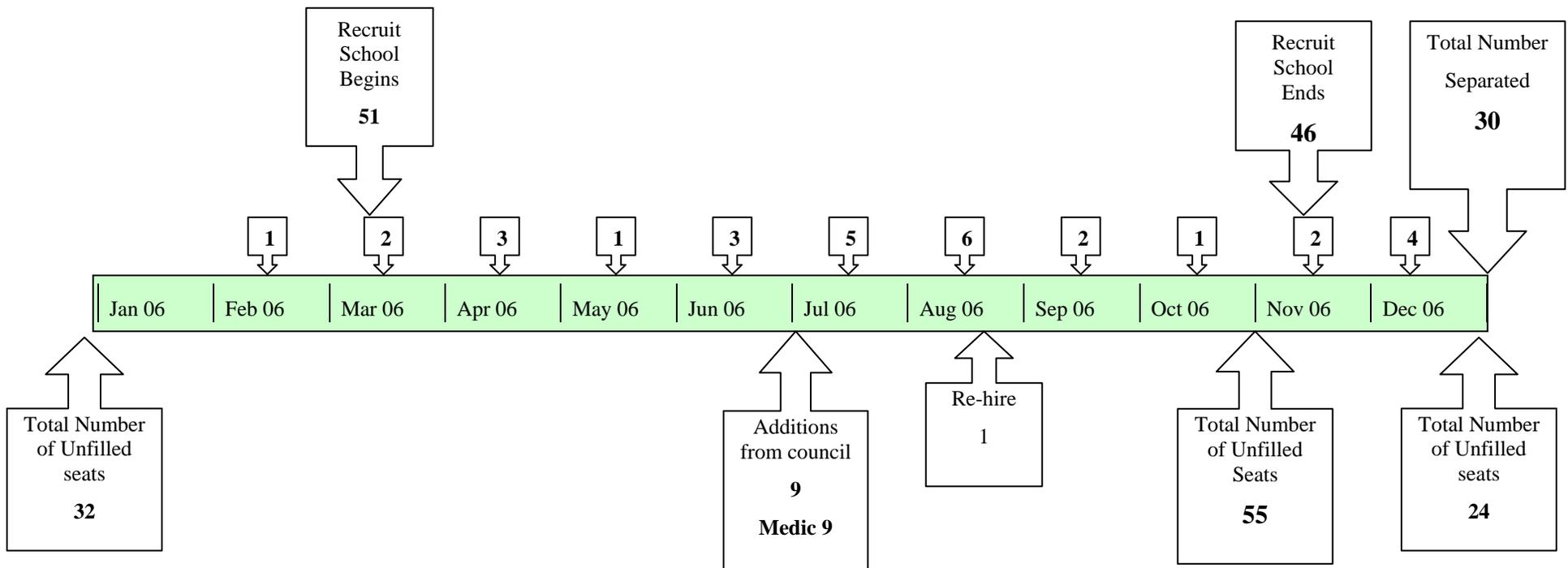
The Fire Department had 32 unfilled seats as of January 1, 2006.

A recruit academy began in March 2006. They graduated and filled field positions in November 2006.

There were 30 firefighters who separated employment in 2006. (13 retired, 15 resigned, 3 released)

Nine additions were added to the complement by City Council for Medic 9. (Camelot) There was one re-hired firefighter.

The Fire Academy graduated 46 recruits in November 2006.



## Vacancy Timeline 2007

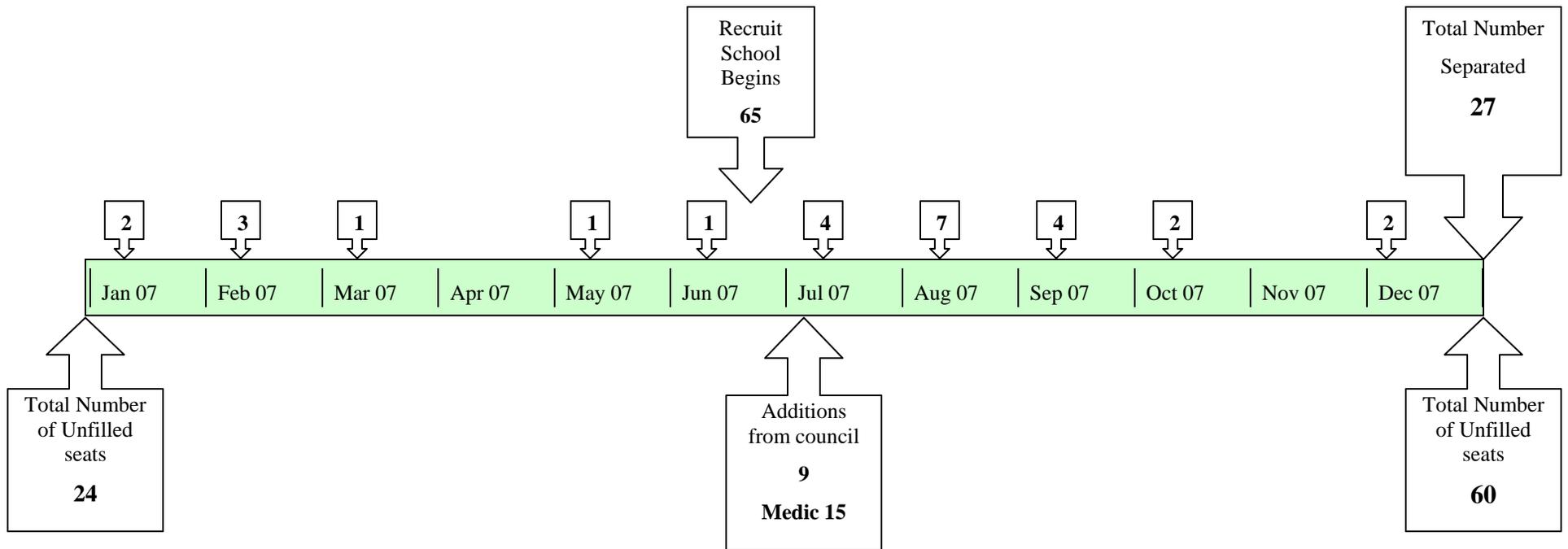
### Number of Employees Separated from Employment

The Fire Department had 24 unfilled seats as of January 1, 2007.

A recruit academy began in June 2007. They graduated and filled field positions in January 2008.

There were 27 firefighters who separated employment in 2007. (10 retired, 15 resigned, & 2 released)

Nine additions were added to the complement by City Council for Medic 15. (Bells Mill)



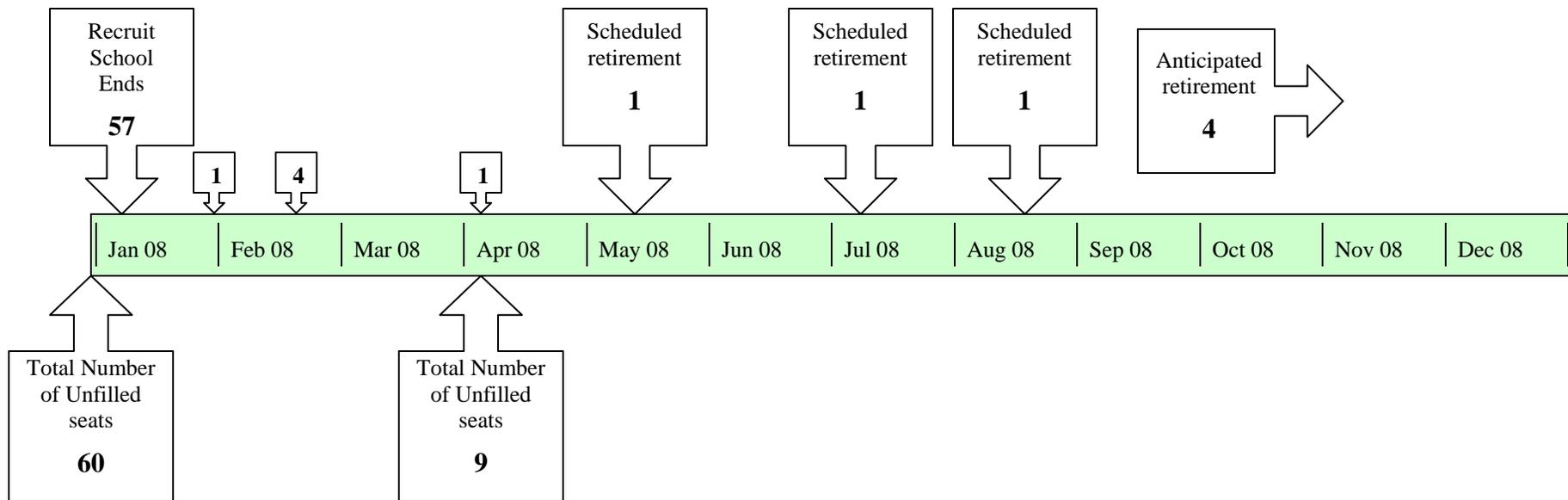
## Vacancy Timeline 2008

### Number of Employees Separated from Employment

The Fire Department had 60 unfilled seats as of January 1, 2008.

A recruit academy began in June 2007. They graduated and filled field positions in January 2008.

There are 6 firefighters who separated employment, three pending retirements and four anticipated retirements in 2008.



## Overtime Drivers

The information below represents the number of daily vacancies that affect daily staffing needs.

### Attrition and Retirements

*Attrition includes Firefighter's who resign for other employment and those who have been released. Over the past three years, thirty members have retired; thirty-nine members have resigned. Of that three members separated employment to work for Virginia Beach EMS and two Firefighters separated employment to work for Virginia Beach Fire, and five were released.*

*Retirements and attrition are continuous throughout each year. The vacancies have been converted to illustrate the effect on daily staffing. Retirements include disability and service retirements.*

*The number of vacancies varies daily. The variables of all overtime drivers must be considered.*

	Attrition	Retirements
2005	3 per day	2.3 per day
2006	6 per day	4 per day
2007	5.6 per day	3.3 per day

### Long Term Sick

*The Long-term sick category includes Firefighters who have missed three or more consecutive shifts. Reasons may be from an on the job and/or off the job injuries or illness. (Cardiac, musculoskeletal, maternity, or illness) The number of vacancies varies daily. When calculating true vacancies, the variables of all overtime drivers must be considered.*

*\*There were nine people who were on long-term sick leave until they retired. Their average time on long-term sick leave until retirement was 7.2 months.*

2005	1.47 per day
2006	1.09 per day
2007	2.98 per day*

### Average Daily Sick Leave

*The average daily sick leave is the amount of sick leave used for short-term illnesses. This average fluctuates daily. These days reflect daily usage and are not calculated with long-term sick leave. In 2006 the average rose slightly due to mandatory overtime. The number of vacancies varies daily. The variables of all overtime drivers must be considered.*

2005	4.5 per day
2006	6 per day
2007	5 per day

### Average per Day Military Leave

*Our department has maintained an average of seven firefighters who serve our military in the reservist capacity. This time reflects their mandatory military responsibilities.*

2005	.43 per day
2006	.23 per day
2007	.47 per day

### Mandated EMS Training, National Fire Academy, Department of Fire Programs and Conferences

*Mandated EMS Training is an annual occurrence. The Fire Department currently provides in-house instruction for many of these courses. Firefighter/EMTs, Firefighter/EMT-Es and Firefighter Paramedics complete these courses on their off-duty days. Federal law requires compensated with overtime pay as these courses are job necessities.*

*The National Fire Academy and the Department of Fire Programs offers fire certification courses along with officer development classes. Our ability to send members to these courses is vital to our Officer Development and succession management initiatives. Firefighters and Fire Officers who attend these courses create vacancies in staffing. These classes are required per their respective Training Matrix which outlines mandatory qualifications for their specific position.*

2005	-----
2006	1.48 per day
2007	1.46 per day

### Annual Leave

*The Fire Department has a total of fifteen leave slots per day. The annual leave usage averages are near capacity. As firefighter seniority increases, the availability of annual leave slots versus firefighter's accrual will bring the annual leave availability to capacity. The number of vacancies varies daily. Many of the annual leave slots can be covered without creating a necessity to hire back. When calculating true vacancies, the variables of all overtime drivers must be considered.*

2005	11.17 per day
2006	13.21 per day
2007	13.16 per day

### Temporary Duty Assignments

*The Fire Department has assigned personnel to a Temporary Duty Assignment (TDA) in order to maintain critical operations. TDAs exist due to the lack designated positions for administrative staff and training. When a temporary assignment is created, a vacancy is created on the roster for field operations. These TDAs perform duties in Health and Safety, Public Information, Information Technology, Quality Assurance, and Training.*

*The Training TDA positions are essential in providing for Fire and EMS mandated certifications and to provide adequate staff for Recruit Academies.*

*The FEMA deployments in 2005 created a numerous vacancies in the last four months of that year. The deployments were for Hurricanes Dennis, Katrina, Ophelia, Rita, and Wilma. Two waves of personnel deployed for Katrina victims. The total number of staffing vacancies was 1.3 per day during the FEMA deployments..*

	Training TDA	Academy TDA	Admin TDA	FEMA TDA*
2005	.66 per day	-----	1.33 per day	.44 per day
2006	1 per day	.66 per day	1.33 per day	-----
2007	1.33 per day	2 per day	1.33 per day	-----

### **Administrative Overtime**

Administrative overtime does not affect staffing levels. This category includes the administrative functions needed to accomplish the Fire Department goals. They consist of the Juvenile Mentor Program, Citizen Emergency Response Team CERT, Emergency Management Public Education, Candidate Physical Ability Testing, Panel interviews, Recruitment, Honor Guard functions, meetings, and radio communications management. Also, instructors are supplied to the Chesapeake Center for Science and Technology to support the Emergency Medical Technician curriculum.

2005	-----
2006	1,587.25 OT Hours
2007	3,017.5 OT Hours

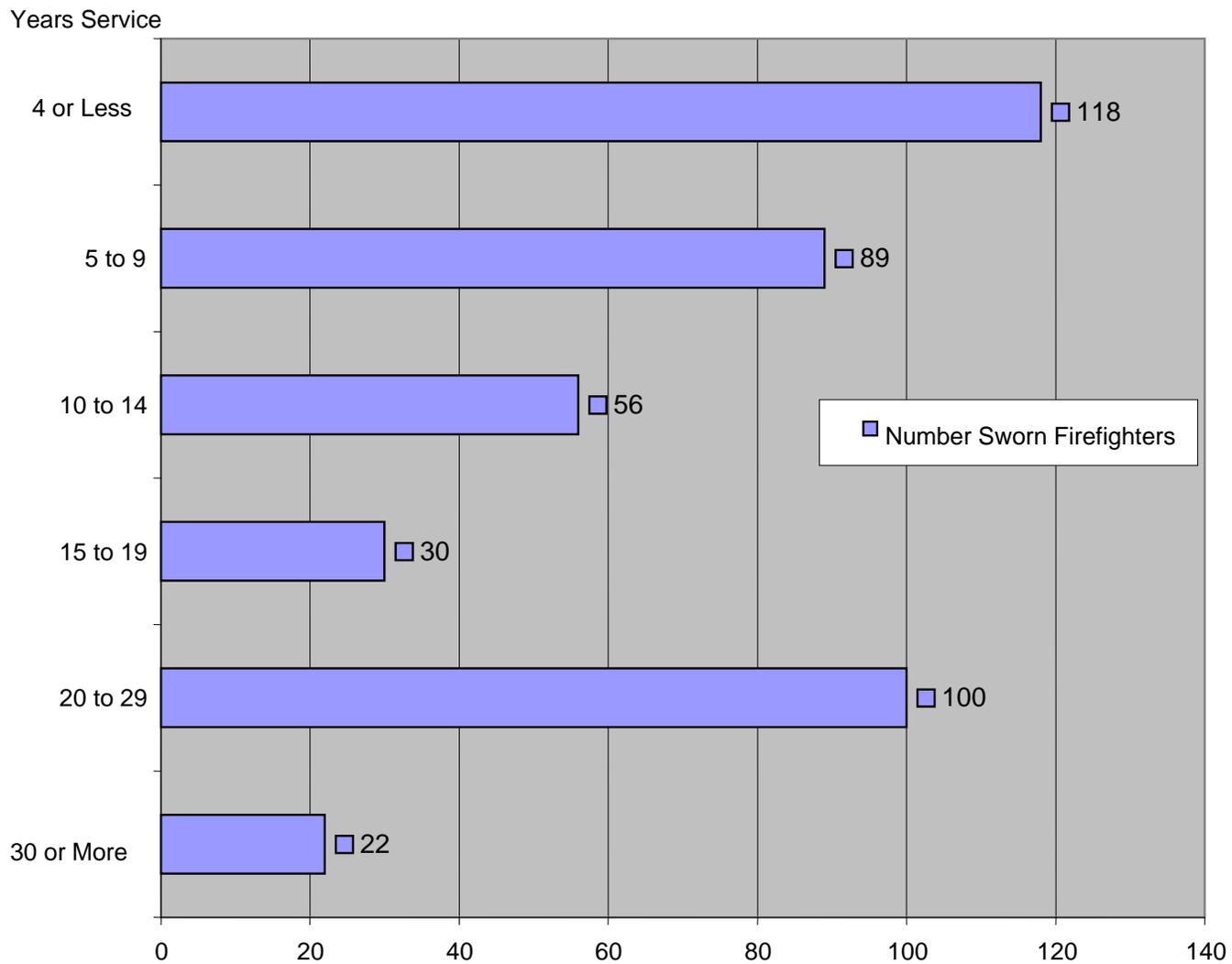
### **\*Drivers of Overtime Summary**

An average of the overtime drivers was calculated. The overall daily averages were added together to represent an average number of daily vacancies. The daily average calculation of **33.56** vacancies encompasses the three years. It illustrates the average number of shortages that affect daily staffing. However, this average number is not a fixed numeral. Staffing levels and vacancy variables are dynamic. They fluctuate daily. As staffing levels drop below a sustainable number, the hire back of overtime personnel increases. On occasion, all of the fifteen annual leave slots may not be utilized. Regular sick leave fluctuates. Some days may experience no regular sick leave usage. On other days, there may be more than the average. Training and conferences are spread at irregular intervals throughout the calendar year. Many of the training days incorporate multiple people attending courses. The staffing fluctuations will decrease or increase the overall daily vacancy number. In view of the fact that minimum staffing has been priority since the loss of two Firefighters in March 1996, the Fire Department has made attempts to fill these vacancies as soon as they occur. The fire department has conducted recruit academies and requested more firefighter positions to assist in alleviating the vacancy issues. As stated in this document, many variables and staffing levels have been exasperated by every one of the overtime drivers.

*\*The data was retrieved from the Chesapeake Fire Department's Telestaff database, annual OSHA reports and payroll files.*

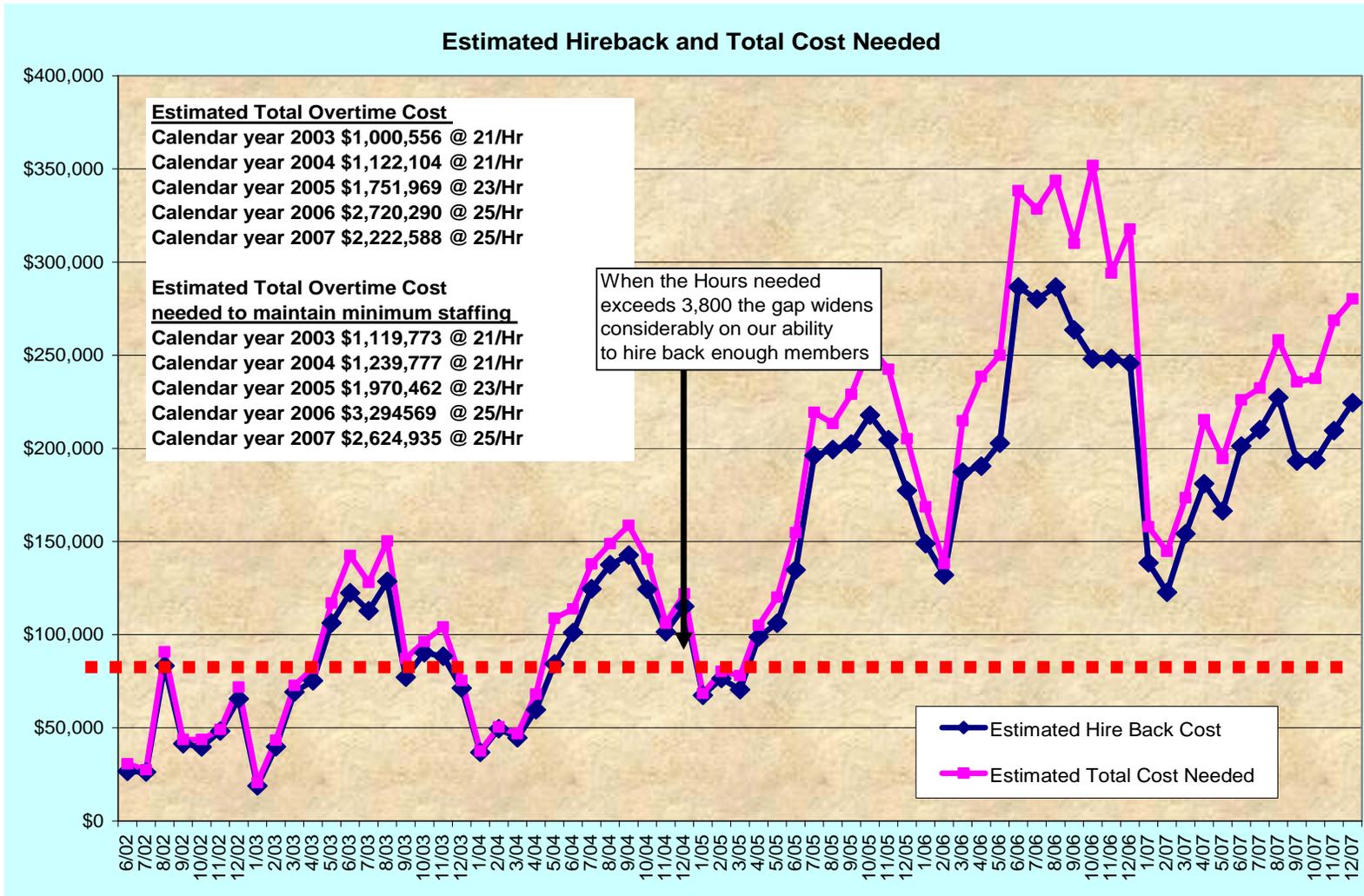
The following chart is an illustration of the current status of the Fire Department's sworn member seniority. Over one-fourth of the fire department personnel have an excess of 20 years service. This statistic is used to identify the necessity of future recruit academies.

**Sworn Firefighters Years Service**



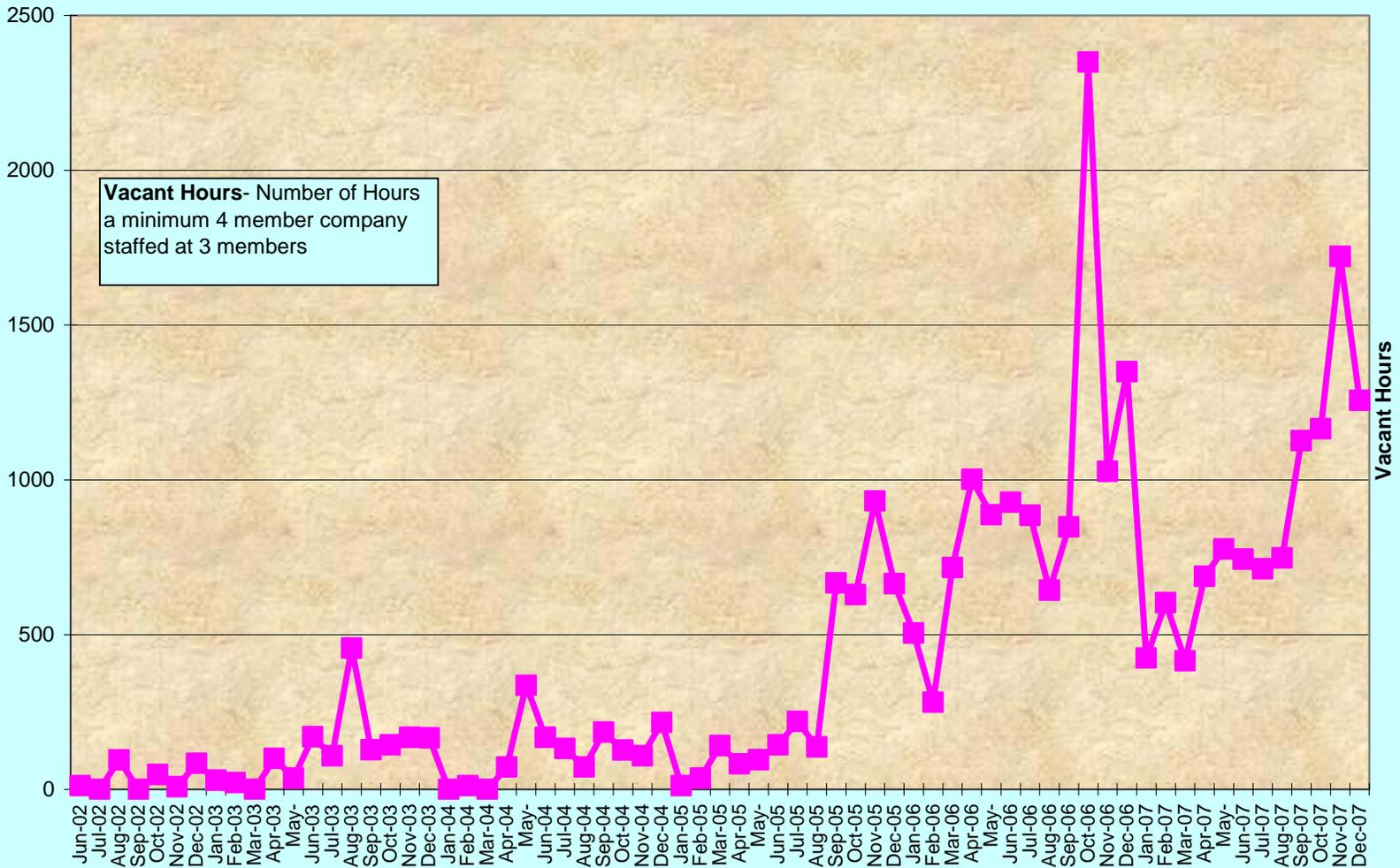
**Notes**

This graph illustrates an estimated cost needed to fill vacancies using overtime. The estimated “Hire Back” cost is the estimated cost of the hire back members for each month. The “Total Cost Needed” is the estimated cost need to simply meet minimum staffing. When the minimum staffing requirements are not met, four-member staffed equipment is staffed with three-members and/or equipment is placed out of service. When the Hours needed exceeds 3,800 the gap widens considerably on our ability to hire back enough members to keep equipment in service and to maintain minimum staffing levels. (See *Estimated Hire back and Total Cost Needed Chart with “Red Line”*). Another factor affecting our ability to hire back is a “thirty-six hour” duty rule. No member is allowed to work more than 36 consecutive hours. This rule provides for safety and wellness of our members. The graph illustrates the historical trends of increased overtime need beginning in the Spring months and showing no reduction of need until the Winter months. Last year displayed an abnormality of increased overtime beginning in October 2007. The rise in Long-term sick leave (2007) has contributed to this trend.



This graph illustrates “Vacant Hours” as they relate to a minimum four-person engine company staffed with three people. Typically, staffing for one day is equal to twenty-four hours. The vacant hours were calculated with a minimum of twelve hours. Thus, with ten four-person companies we could sustain up to 240 vacant hours in one day. The trend translates to our inability to hire back and obtain minimum staffing. The vacant hours are the total hours a company was staffed below the requirement. This graph also gives a cause and effect of increased vacancies and our inability to hire back to obtain minimum staffing.

**Number of Vacant Hours a Four-member Company is Staffed with Three members**



The “Fire Company out of Service” graph illustrates the occurrence of an Engine Company and/or Ladder Company that is placed out of service due to our inability to hire back enough personnel to meet our minimum staffing requirement. This trend also has a direct correlation to the rise in hire back need with our inability to obtain minimum staffing. The thirty-six hour rule decreases our hire back availability list.

**Number of Occurances a Fire Company was Placed Out of Service in a Month**

