

*The County of Chester
Office of the Controller
Internal Audit Department*



*Management Letter
Performance Audit
Department of Emergency Services*

Valentino F. DiGiorgio III

Valentino F. DiGiorgio, III, Controller

**PERFORMANCE AUDIT
DEPARTMENT OF EMERGENCY SERVICES**

I. Introduction

On March 23, 2009 we completed a performance audit of the Department of Emergency Services (“DES”). The objectives of this audit were to (i) provide an objective assessment of the operation of *DES*, (ii) evaluate the economy and efficiency of the County of Chester’s (*County’s*) *DES* and (iii) to offer recommendations where necessary to enhance the existing operation in an effort to save *County* funds, resources and increase efficiency. The scope of our audit included the following:

- A review of *DES* organizational charts
- A review of *DES* job descriptions
- Interviews with members of *DES* management; more specifically the Director, Assistant Directors, and Deputy Directors
- Interviews with County of Chester 1st responders
- A review of staffing levels for the *County’s* 911 center
- A comparative analysis of the 911 center’s current 12 hour shift as compared to a proposed 8 hour shift
- A review of the *DES* timekeeping system and payroll process
- A review of grant awards and Homeland Security purchases
- A tour of the *DES* off-site storage facilities referred to by management and staff as “Karlville”(named after the Deputy Director of Emergency Management)
- Rebanding
- HAZMAT responses
- Inquiries and comparisons with other County *DES* administrations
- Fraud Hotline tips.

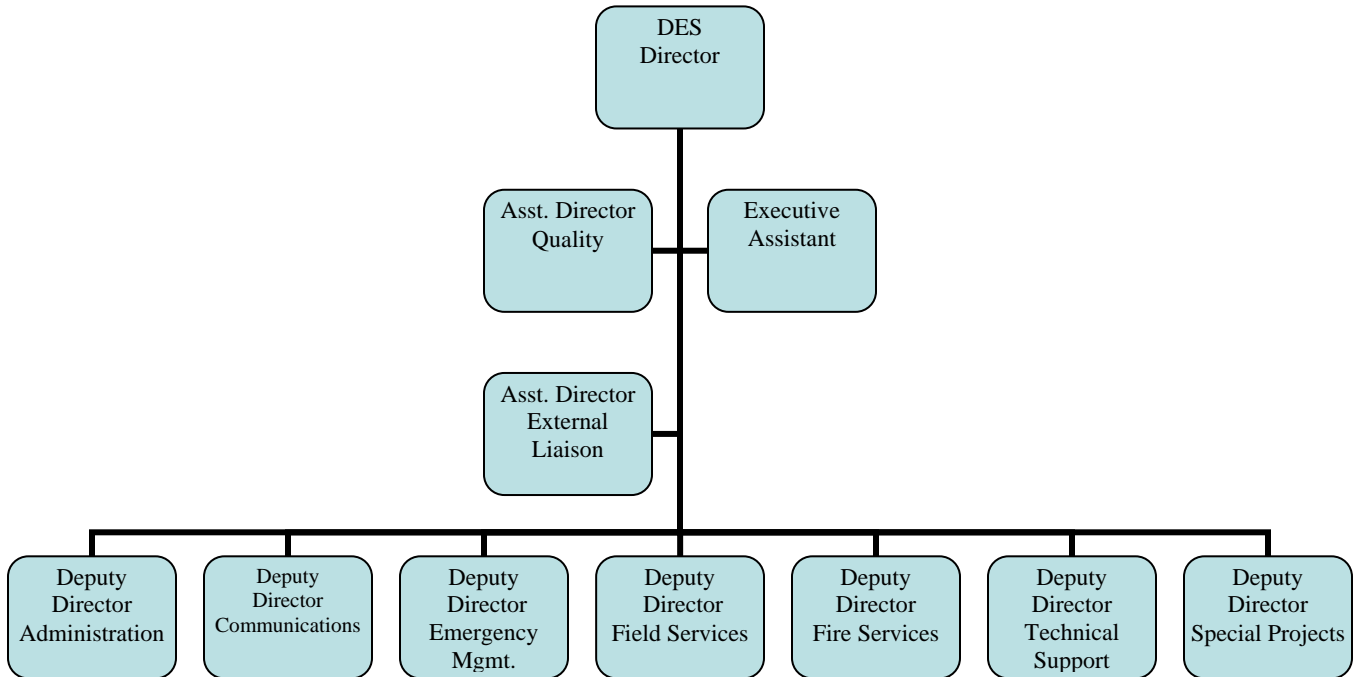
II. Organizational Structure

The current organizational structure of *DES* contains a number of Deputy and Assistant Director positions. Although the salary grades for these positions are not set at the “director” level” the titles may be misleading and suggest a higher level of management than what is truly in place. Human Resources has informed Internal Audit that this is standard practice at the *County* and that most departments have historically used more elaborate titles. Although it can be argued that these positions are the industry equivalent of a “manager”, the title of manager is seldom used by the *County*. It should be noted however, that prior to the appointment of the current *DES* Director in 1997, these Deputy Director positions were titled “Manager”.

Internal Audit provided “job activity” questionnaires to the various *DES* Deputy and Assistant Directors. Based on a review of these questionnaires and discussions with the Deputies and Assistants, Internal Audit feels that all but one of these areas requires a “stand alone” management position. A “job activity” questionnaire completed by the “Deputy Director for Special Projects” indicates that most tasks currently performed by that individual could be absorbed by the remaining Deputy Directors. Additionally, one

aspect of the job, *County* pager liaison, seems inappropriately assigned and will be revisited as part of Office of the Controller’s performance audit of cell phones and pagers scheduled for later this year. Internal Audit projects that the *County* could save approximately \$65,000 a year by eliminating this Deputy Director position and reassigning tasks and responsibilities to the other deputies.

Current *DES* Organizational Structure



III. Public Perception (First Responders)

During the past several months, various leaders of the *County’s* first responder community have contacted the Controller and Internal Audit expressing concern with the management of the Chester County *DES* (as opposed to the day to day operations there). Their comments demonstrate a lack of cooperation between local law enforcement and *DES*. Local law enforcement and first responders have expressed concern that *DES* management has not adequately solicited them with respect to matters related to their respective departments and organizations. According to representatives from police and fire departments, decisions are usually made unilaterally at the *DES* level. For instance, law enforcement leaders have cited the failure of *DES* to consult with them regarding the distribution and use of Homeland Security grants and that *DES* spends the money either for its own benefit or that it purchases items for the first responders that are not necessary or useful.

Without making any judgment herein about the truth of these allegations, Internal Audit urges *DES* management to actively and continuously solicit the opinions of the first responder community in making the determination of how to spend, allocate and disburse

Homeland Security and other grants for the benefit of such law enforcement agencies and organizations. Internal Audit also recommends that *DES* not only meet regularly with representatives of the first responder community to assess their needs, but that the *DES* Director also have all purchases approved in advance by the Chester County Commissioners prior to any Homeland Security, or *PEMA* monies being expended.

Additionally, some in the first responder community have stated that *DES* does not place the required emphasis on pressing matters involving their safety – namely the persisting problems with the 800 MHz radio system, and the re-banding process. Law enforcement leaders have requested that the *DES* Director focus on this important priority. Internal Audit has determined that the re-banding project has in fact not met the Federal Communication Committee’s (“*FCC*”) established deadline. According to the *DES* Director, the reason for the delay is 3-fold:

- 1) Time spent in litigation
- 2) Problems in acquiring comparable radios from vendor EF Johnson needed as part of the re-banding project
- 3) Confusion over who is in charge of the overall project.

Despite the delay, Internal Audit has confirmed that the *County* is moving forward with the re-banding process and that there are efforts underway to upgrade the current analog radio system to a digital system hopefully within the next five years. The system upgrade and re-banding process will be discussed separately and in more detail later in this report.

Lastly, a final complaint of law enforcement officials - the absence of a police liaison - has been addressed by the County Commissioners earlier this year. Effective January 2009 an individual from the Chester County District Attorney’s Office has been appointed to this position.

IV. 911 Center Staffing and Shifts

The Chester County *911* center is currently staffed with four platoons. Each platoon is comprised of a platoon leader, an assistant supervisor, three police dispatchers, three fire / EMS dispatchers, two scope personnel and call-takers. As of the end of December 2008, three of the four platoons were staffed with 15 employees and one platoon was staffed with 14 employees. According to *DES* management, the goal is to have 18 employees in each platoon.

The normal rotation for these platoons is to work two day shifts, two night shifts and then have four days off. Employees appear to be pleased with this regimen because it affords them a considerable amount of overtime pay and, if scheduled correctly, can give them 12 consecutive days off by using only four vacation days.

Internal Audit questions whether the considerable expense of paying overtime is sufficiently justified by the purported benefits of using 12 hour shifts. Indeed, law enforcement has confirmed to Internal Audit that 12 hours is a long time to stay focused and alert, especially on a day with little or no activity. Given the lack of substantiated

need for 12 hour shifts (and the fact that such long shifts may be detrimental in such an important emergency management function), Internal Audit recommends that this practice be terminated and normal 8 hour shifts be implemented.

All departments, especially during these economic times, should be looking for ways to save the *County* and its taxpayers, money. By reducing the duration of each shift from 12 to 8 hours, increasing the number of shifts (from two 12 hour shifts to three 8 hour shifts) and using a “scheduling pattern” (See e.g. Attachment A) similar to the one used at the Chester County Prison, the *County* could reduce its annual *911* payroll cost by at least 15% (or a minimum of \$252,000 per year) if the platoon staffing levels remained at 15. Internal Audit should point out that this figure is merely an *estimate* based on average hourly rates and a normal schedule.

Potential savings estimated above are actually understated since they do not consider work schedule exceptions. In fact, as shown in Table 4-1, *actual* annual overtime payments for the past six years have been much higher - \$467,000 to \$697,000. Based on the foregoing (received directly from the *County's* payroll system), expected savings would be more than our estimated amount.

Table 4-1

911 Annual Overtime Payments 2003-2008

2003	-	\$696,548.42
2004	-	\$510,220.83
2005	-	\$466,988.58
2006	-	\$509,671.80
2007	-	\$528,931.96
2008	-	\$539,517.33

The purported need to increase each platoon’s staffing level to 18 should also be closely scrutinized. Current staffing levels provide at least seven people to answer incoming calls. This number does not include the six dispatchers or two scope employees but does include the two shift supervisors. It would appear that for normal conditions, this current staffing should be sufficient. During extenuating circumstances or states of emergency, additional manpower could be called upon as needed. Internal Audit believes this would be the exception and not the rule.

To further support our position, we call attention to the fact that *DES* records for January through November 2008 indicate that quality assurance ratings for the *911* center surpassed *PEMA* standards in all areas –

- Telephone reviews
- Radio reviews
- Emergency medical dispatch reviews
- Customer procedural satisfaction, and
- Customer overall satisfaction.

For six of these months, the results were achieved under current staffing levels (59-60). The remaining five months had staffing levels of 62-65. At no point during the year did the staffing levels reach the desired level of 72 (or 18 per platoon). Based on the foregoing, there does not appear to be ample justification for adding three more employees to each platoon.

Lastly, Internal Audit learned that the *County's 911* Center originally operated on an 8 hour schedule until a committee of *911* employees petitioned for the change to 12 hour shifts. Internal Audit believes that the “built-in” overtime factor was one of the driving forces behind this change request.

To summarize, Internal Audit believes that by changing the duration of the *County's 911* shifts from 12 hours to 8 hours, annual overtime expense for *DES* could be reduced by 60-70%. In addition, Internal Audit has determined that plans to increase *911* staffing levels may be unwarranted at this time and deserve close scrutiny by the County Commissioners. Quality assurance reviews indicate that shifts comprised of 15 call takers and dispatchers provide ample coverage and quality service during normal conditions.

V. Timekeeping and Payroll Process

To “plan and coordinate plans to streamline the payroll process” is one of the essential duties listed on the Deputy Director for Administration’s job description. During our interview of this individual, the Deputy Director informed Internal Audit that at this time, the department found no discernable ways to improve upon or streamline their payroll process and invited Internal Audit to make their own assessment. In accordance with the goals of our performance review (to evaluate economy and efficiency), Internal Audit accepted the invitation and reviewed the timekeeping process with the *DES* Facilities Coordinator (department timekeeper) and recalculated an entire payroll for the period ending 8/29/08.

A. Process

The current time and attendance system requires an individual to *manually* complete a timesheet weekly and to forward to the timekeeper. The timekeeper then *manually* enters this information into an excel spreadsheet. It is from this excel spreadsheet that information is again *manually* transferred into the Peoplesoft payroll system.

B. Findings

Payroll records for the pay period ending 8/29/08 contained many input errors; both from the timesheet into excel and from excel into Peoplesoft. Internal Audit believes that some of these errors can be eliminated if *DES* uses a different timesheet for all employees other than the *911* center. This form is automated through excel and would be completed every two weeks. The form provides codes for all timekeeping exceptions and is calculated automatically. Information from this form will be entered directly into

Peoplesoft eliminating the “excel spreadsheet” step. (A copy of this form is attached for management’s review and consideration – Attachment B.) The timesheet process for the 911 Center employees will remain unchanged.

In addition to the excessive manual manipulation of payroll data, Internal Audit identified several other weaknesses in the overall timekeeping and payroll process which need to be remedied. These items are listed below:

- **Some individuals are not submitting timesheets.** All employees, even the *DES* Director must submit a timesheet.
- **Timesheets are not completed in their entirety.** The new form will be easier to complete since it is in excel. Only non-exempt employees will be required to record “time in and out” information.
- **Changes / corrections are being made to time sheets which are not initialed to denote that the change was approved or authorized.** Any change to a timesheet should be initialed to show who made the change and to acknowledge that the revision was authorized.

C. Recommendation

Internal Audit further recommends that *DES* consider implementing a time and attendance system similar to that used at the Chester County Prison and Pocopson Home. A system like Kronos would enhance the accuracy of timekeeping records since all employees would clock in and out. It is further possible that the system could be made to interface with the *County’s* payroll system (Peoplesoft) eliminating most, if not all, manual processes.

VI. Grant Awards

DES receives funds from various grants awarded through *PEMA* and the Pennsylvania Department of Health. Monies are used to provide training and support for the *County’s* HAZMAT Team and Emergency Medical Technicians (EMTs / EMS), and to provide supplies and equipment to those areas geographically at risk of fallout from a nuclear disaster occurring in one of the neighboring power plants, specifically Limerick or Peach Bottom. In addition, another grant awarded through *PEMA* provides funding for a portion of the *DES* Director’s salary. Approximately 38% of the *DES* Director’s annual salary is paid through subsidized state funding in order to cover costs associated with his role as “Emergency Program Manager”.

Interviews with grant coordinators and the *DES* Accountant, in addition to a review of grant related records and reports, provided Internal Audit reasonable assurance that funds received from the Commonwealth of Pennsylvania are used for their intended purpose and are expended in accordance with the terms stipulated within each grant.

VII. Homeland Security Purchases

In 1998, *PEMA* recognized that a large unexpected technological emergency or significant natural disaster could devastate counties throughout Pennsylvania. As a result, they established several regional task forces to help prepare for such catastrophic events. The Southeastern Pennsylvania Regional Task Force is one of nine such groups existing statewide. Chester County is part of this task force.

In addition to several smaller grants, there are two major federal funding streams to support the goals of these task forces – the State Homeland Security Grant Program and the Urban Area Security Initiative (“*UASI*”). For both of these programs, funds flow from the Department of Homeland Security to *PEMA* and then to the individual task forces. Funds are to be used for both regional and “local” projects.

As mentioned earlier, there are concerns about the way that Homeland Security funds are being spent in Chester County. To this end, Internal Audit reviewed records which itemized purchases made from 1999 – 2006. (According to *DES*, allocations for 2007 and 2008 had not yet been received.) In addition, Internal Audit asked to visit the *DES* storage facilities (“Karlville”) which mostly house items purchased through Homeland Security and *UASI* funds.

Our review disclosed that over the seven year period, approximately \$13 million of federal funding was spent for the “benefit” of Chester County. Of this amount, almost \$10 million was equally allocated to be expended for the benefit of police and fire disciplines respectively. It should be noted however, that equipment, clothing and kits valuing in the hundreds of thousands of dollars is currently being held in storage by *DES*. In light of the expressed concerns of the first responder community, Internal Audit asked the following questions about the items currently maintained in storage:

1. Why are these items being held in storage rather than being distributed to the intended parties?
2. Have the first responders been made aware of what was ordered for them and that it is being held in storage?

In answer to the first question, *DES* has informed Internal Audit that some of the items being held, such as “millennium response kits” and “smart packs” cannot be distributed until recipients attend specific and required training. According to *DES*, such training has not been completed in its entirety because funding has run out. Internal Audit questions why this was allowed to occur. Training should have been scheduled and completed before kits were ordered. Failure to ensure that kits and packs can be distributed equates to a waste of federal resources. Internal Audit urges better coordination with appropriate law enforcement agencies and fire personnel.

In order to answer the second question, we need to consult with the first responders. Internal Audit recommends that a listing of what is being held in storage be provided to police, fire, and EMS representatives to peruse, act upon, and finally claim. Without knowledge of what they currently have, first responders could inadvertently order

something that they already have, creating an overabundance and a waste of governmental funding.

Other types of items currently in storage:

- A large number of educational pamphlets and booklets intended for public awareness that have not been circulated.
- Updated versions of the MDC mobile laptop computers which have not yet been distributed / installed in police and fire vehicles.
- Items that were sent to the *County* in error but deemed less expensive to keep rather than send back to the vendor.
- Items that were purchased in large quantities (HAZMAT suits and mask cartridges) that have or will shortly surpass their shelf life and will no longer be useful.

(It is important to note that the County Of Chester spent approximately \$15,000 for the *DES* storage facilities in 2008.)

VIII. Rebanding

Over the past several years, public safety and other “high-site” radio systems – including those used by police, firefighters, and emergency services operating in the 800 MHz band – have increasingly been experiencing equipment interference problems and communication “dead zones” as a result of technically incompatible “low-site” commercial wireless systems operating in the same or adjacent spectrum bands.

The 800 MHz interference problem surfaced in large part because the *FCC*’s original 800 MHz band plan did not anticipate the extent of development and growth of “low-site” cellular type systems. As these low-site systems (such as those of Sprint Nextel) flourished, and as high-site 800 MHz public safety systems also became more widespread, interference problems became more common. Given the importance of first responder and emergency communications, the *FCC* began addressing this serious issue in April 2000.

In August 2004, the *FCC* released a two-pronged solution to address 800 MHz interference problems in both the short and long term. The first prong of the *FCC*’s solution was the creation of a technical standard for determining whether an 800 MHz licensee was entitled to interference protection and related procedures for avoiding and eliminating harmful interference. The second prong, the long term solution, involved the reconfiguration of the 800 MHz band to separate generally incompatible high-site and low-site technologies.

The *FCC* plan was designed to provide an effective and equitable solution with minimal disruption to users of the 800 MHz band. Sprint Nextel agreed to pay all reasonable and prudent expenses directly related to the retuning of the 800 MHz system. Reconfiguration was scheduled to be completed by June 26, 2008.

As of February 2009, the County of Chester's *DES* has still not completed the re-banding process. We understand that this is largely due to the failure of a service provider to make available promised funding. Equally troubling is the fact that the re-banding process will not solve all of the *County's* radio problems. The system itself is antiquated and, as a matter of fact, replacement parts and equipment are hard to come by. The *County* has resorted to purchasing used parts off of *ebay* to help "buy some time". The re-banding order will only move police, fire, and emergency calls to one section of the 800 MHz band separating them from cellular type systems which will be moved to a different section of the 800 MHz band. This re-banding is needed to reduce or eliminate interference issues; however *DES* will still have the same obsolete analog system and "dead zones".

Dead zones occur because of the need for additional towers as well as the natural topography of the area. Land owners oppose the placement of towers on their property and the *County* does not appear to be taking steps to encourage and persuade Chester County residents and businesses to view the positive effects the towers can have on the community. This is going to become an even greater concern when the current analog radio system is finally upgraded to a digital system since the digital system will require even more towers to operate properly.

Internal Audit recommends that the County of Chester put a plan in place as soon as possible to start promoting public awareness related to the need for more towers. *DES* has indicated that a new digital radio system is expected to cost approximately \$75 million dollars. It would not be prudent to spend that kind of money for a new radio system that will again fall short and leave our first responders at risk because their communication system did not function properly.

IX. HAZMAT Responses

Internal Audit has determined that there are payroll inconsistencies within the *County* related to individuals who are regular full-time employees and who also serve as *County* HAZMAT responders. Employees, who work within *DES*, are allowed to respond to a HAZMAT incident during their normal "work" hours without having to take personal or vacation time. A responder who works for the Health Department however is required to use vacation or personal time if they respond to a call during their normal shift.

Inquiries made with *DES* management indicate that the industry standard in this matter is to allow HAZMAT responders to answer a call (circumstances permitting) without having to use vacation or personal time. According to a former *industry* employee who now works for the *County DES*, other companies view this as a civic duty. Based on this information, it seems contradictory to require *County* employees who are performing an additional duty for the benefit of the *County* at large, to use their **own time** to fulfill their commitment as a "Hazardous Material Responder".

Internal Audit suggests that the Commissioners consider approving a policy whereby employee / HAZMAT responders would be permitted to answer calls during normal business hours (circumstances permitting) without using personal or vacation time. Time

expended for training however, should continue to be the responsibility of the employee and would require the use of their vacation or personal time.

It should be noted that Internal Audit intended to contact other employers for the County's HAZMAT team in order to compare their policies in regard to this matter. Although *DES* management provided the list of other employers, Internal Audit was asked not to follow through with this process since one of the HAZMAT responders threatened to quit the team if a phone call was placed to his/her boss.

X. Other Matters

A. Public Safety Training Facility

The County of Chester is currently in the process of establishing its own training facility where all emergency response disciplines can train and learn together in a uniform and lifelike setting. The need for such a facility has been recognized for many years and now the Chester County Public Safety Training Facility ("*PSTF*") project is turning the need into reality through a public/private partnership that includes first responders, all levels of government and the private sector. The project is comprised of two phases. Phase I will concentrate on constructing the main facility and include everything needed to perform field training. Phase II will focus on academics and classroom instruction.

At this time, Phase I construction has been halted pending Township approval at the building site. East Fallowfield Township has imposed three conditions which are currently in litigation. These conditions are:

- 1) That the training facility could not commence activity until after 9 a.m.,
- 2) That a police station would be constructed for the Township and remain cost free for 99 years,
- 3) That significant improvements be made to the intersection around the facility site.

Continued delays may adversely affect the project by increasing the overall cost of the *PSTF*. Although current economic conditions may be favorable to this undertaking, it is difficult to predict how future economic conditions will impact the costs of constructing the *PSTF* over the next year.

B. Spending

In these economic times, *DES* should consider becoming more prudent with its spending. A review of voucher payments and credit card purchases disclosed opportunities where the department could save the county (and its taxpayers) money. Meetings and instructional gatherings should not include provided meals unless the attendees are paying a fee for the event which will offset the cost of the food. In addition, trips to out-of-state locations should be eliminated unless the Commissioners, based on the written recommendation of the Director of *DES*, deem the purpose of the outing to be critical to the operation and success of *DES*. Lastly, non-essential purchases should be deferred to a later time.

C. Certified Training Officers

Within the 911 center, experienced call takers can attend additional training to be classified as “Certified Training Officers” or CTOs. CTOs have the responsibility of shadowing new call takers when they are first assigned to the radio room. Under current procedures, CTOs are paid their normal salary as a call taker and are also paid an extra rate for shadowing a new call taker. The CTO will continue to receive this additional rate until the new call taker is ready to work independently. This practice is inconsistent with other *County* offices and implies that one’s role in training a new employee should be considered a separate job. Internal Audit strongly recommends that CTO’s be paid one set salary at all times and that their assistance in training another call taker should be regarded as part of their job and included in the description of their duties.

D. Employees with Multiple Jobs

Internal Audit has been advised that several *County* and *DES* employees wear multiple hats either within their department or between departments. Although this practice is permissible by *County* Commissioners, it creates extra work for the payroll office since they are required to compute weighted averages for employees who have different hourly rates for each job. In many cases, the hourly rates may only differ by \$2 or less. Internal Audit suggests that this weighted average calculation be re-examined by payroll and Human Resources to determine if it is necessary and time / cost efficient.

E. Work Environment

During the course of the audit, Internal Audit spoke with several individuals who complained of the Director’s frequent use of abusive and profane language in the workplace. The County of Chester maintains in its employee handbook that “obscene or abusive language”, as well as the “intimidation of employees at any time, for any purpose” represents offenses “which are subject to disciplinary action up to and including immediate termination.” The Chester County Commissioners believe that all employees have the right to work in pleasant and professional surroundings. Internal Audit suggests that the Director be required to revisit the *County’s Respectful Workplace* program and that *DES* employees and first responders be encouraged to report future incidents of inappropriate behavior directly to Human Resources. The Commissioners should be prepared to act in accordance with “progressive disciplinary” action as outlined in the *County’s* employee handbook. Since the use of vile, foul or abusive language is considered a “major offense” the following action would be required:

- 1st Offense – Written warning
- 2nd Offense – Suspension
- 3rd Offense – Termination.

Internal Audit has advised complaining employees to report any incidents of inappropriate or intimidating communications and events to the County’s Human Resources Department for handling in accordance with established County policies and procedures.

XI. Inquiries and Comparisons with other Counties

Internal Audit contacted three neighboring counties (Montgomery, Bucks, and Berks) in order to compare and contrast procedures, processes, and techniques. Only two of the three counties responded to this information request. Bucks County, which is also a member of the Southeastern Pennsylvania Regional Task Force, operates in a manner similar to Chester County when it comes to 911 shifts, time and attendance and certified training officers.

Berks County on the other hand, (a member of the East Central Pennsylvania Task Force) seems to function in a manner which mirrors the recommendations made herein this report. With regard to 911, it is important to note that the number of emergency calls answered by Berks County in 2007 was 322,723 and increased to 336,205 in 2008. The number of calls answered by Chester County 911 during 2007 was 297,387.

Berks County

Berks County currently has 44 full-time 911 employees but its preferred threshold is 51. In addition it has about 15 part-time employees who are used to fill shift vacancies as needed. The 911 Center is staffed with three 8 hour shifts:

- Watch 1 (0000 – 0800)
Minimum of 9 (6 radio dispatchers, 3 call takers, 1 supervisor)
- Watch 2 (0800 – 1600)
Minimum of 11 (7 radio dispatchers, 4 call takers, 1 supervisor)
- Watch 3 (1600 – 2400)
Minimum of 12 (7 radio dispatchers, 5 call takers, 1 supervisor)

The 911 Center also employs “certified training officers” (CTOs) who provide most of the training for new telecommunicators. Job descriptions for these individuals include “training” as a normal part of their job. As such, CTOs are not paid extra to train new call-takers.

Berks County utilizes a time and attendance system called Smart Linx which was specifically designed for nursing facilities. This “time punch” system eliminates the need for significant amounts of manual data entry and lends itself to a 24 hour operation.

Homeland Security and UASI purchases are all approved by the County Commissioners. HAZMAT responders who are also employed by the county on a full-time basis get paid for an incident as part of their normal salary.

XII. Fraud Hotline

The Office of the Controller received an anonymous tip via the Controller’s Fraud Hotline suggesting that there is little or no control over personnel in DES. The claim

implies that employees can open work stations for their friends, turn on lights, etc. to make it appear as if the employee is there when in fact he is not. This is an allegation of “attendance fraud”.

Although Internal Audit was unable to verify these allegations, *DES* management is urged to monitor for such activities. Again, Internal Audit recommends a “time clock” system be implemented at *DES* to deter this type of activity.

XIII. Conclusion

Internal Audit would like to thank the management and staff of *DES* for their cooperation and assistance during the course of this audit. A closing meeting was held on April 7, 2009 with managers of *DES* and the Office of the Controller to discuss the outcome of the audit. The *DES* Director has also been given an opportunity to respond to the suggestions and recommendations presented within this report. These comments are included herein.

8 hour schedule patterns

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
7:00 - 3:00			7:00 - 3:00	7:00 - 3:00	7:00 - 3:00	7:00 - 3:00
7:00 - 3:00	7:00 - 3:00			7:00 - 3:00	7:00 - 3:00	7:00 - 3:00
7:00 - 3:00	7:00 - 3:00	7:00 - 3:00			7:00 - 3:00	7:00 - 3:00
7:00 - 3:00	7:00 - 3:00	7:00 - 3:00	7:00 - 3:00			7:00 - 3:00
7:00 - 3:00	7:00 - 3:00	7:00 - 3:00	7:00 - 3:00	7:00 - 3:00		
	7:00 - 3:00	7:00 - 3:00	7:00 - 3:00	7:00 - 3:00	7:00 - 3:00	
		7:00 - 3:00	7:00 - 3:00	7:00 - 3:00	7:00 - 3:00	7:00 - 3:00

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
3:00 - 11:00			3:00 - 11:00	3:00 - 11:00	3:00 - 11:00	3:00 - 11:00
3:00 - 11:00	3:00 - 11:00			3:00 - 11:00	3:00 - 11:00	3:00 - 11:00
3:00 - 11:00	3:00 - 11:00	3:00 - 11:00			3:00 - 11:00	3:00 - 11:00
3:00 - 11:00	3:00 - 11:00	3:00 - 11:00	3:00 - 11:00			3:00 - 11:00
3:00 - 11:00	3:00 - 11:00	3:00 - 11:00	3:00 - 11:00	3:00 - 11:00		
	3:00 - 11:00	3:00 - 11:00	3:00 - 11:00	3:00 - 11:00	3:00 - 11:00	
		3:00 - 11:00	3:00 - 11:00	3:00 - 11:00	3:00 - 11:00	3:00 - 11:00

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11:00 - 7:00			11:00 - 7:00	11:00 - 7:00	11:00 - 7:00	11:00 - 7:00
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11:00 - 7:00	11:00 - 7:00	11:00 - 7:00			11:00 - 7:00	11:00 - 7:00
11:00 - 7:00	11:00 - 7:00	11:00 - 7:00	11:00 - 7:00			11:00 - 7:00
11:00 - 7:00	11:00 - 7:00	11:00 - 7:00	11:00 - 7:00	11:00 - 7:00		
	11:00 - 7:00	11:00 - 7:00	11:00 - 7:00	11:00 - 7:00	11:00 - 7:00	
		11:00 - 7:00	11:00 - 7:00	11:00 - 7:00	11:00 - 7:00	11:00 - 7:00

**EMPLOYEE TIME SHEET
EMERGENCY SERVICES
COUNTY OF CHESTER**

John Doe
EMPLOYEE NAME

55555
EMPLOYEE NUMBER

February 20, 2009
WEEK ENDING

Day	Morning Code		Afternoon Code		After Hours		Comments	REG	VAC	SKO	PTO	FHT	HOL	OST	OTP	CTP	CTU	CTE	TOTAL HOURS	
	In	Out	In	Out	In	Out														
Saturday	0730	1130			1900	2400	Training - Morning; Pager Problem	4.00										5.00	4.00	
Sunday																				0.00
Monday	0800	1200					4 Hours Comp Time Taken	8.00												8.00
Tuesday	0900	1200	1230	1730				8.00												8.00
Wednesday	0900	1200	1230	1730				8.00												8.00
Thursday	0900	1200	1230	1730				8.00												8.00
Friday	0900	1200	1230	1730				4.00							4.00					8.00

February 27, 2009
WEEK ENDING

Day	Morning Code		Afternoon Code		After Hours		Comments	REG	VAC	SKO	PTO	FHT	HOL	OST	OTP	CTP	CTU	CTE	TOTAL HOURS	
	In	Out	In	Out	In	Out														
Saturday																				0.00
Sunday																				0.00
Monday	0900	1200	1230	1730				8.00												8.00
Tuesday	0900	1200	1230	1730				4.00									4.00			8.00
Wednesday								8.00												8.00
Thursday								8.00												8.00
Friday								8.00												8.00

							REG	VAC	SKO	PTO	FHT	HOL	OST	OTP	CTP	CTU				
SUMMARY							52.00	24.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	4.00	84.00		

32864

Comp Time Calculation

BALANCE FWD = 0.00
 COMP EARNED = 5.00
 COMP PAID = 0.00
 COMP TAKEN = 4.00
 BALANCE = 1.00

Approval

Authorization

Employee Signature

CODES TO BE USED:

BDO - Blood Day Off
 BRV = BEREAVEMENT
 CTE = COMP TIME EARNED
 CTU = COMP TIME USED
 FHT = FLOATING HOLIDAY

FLP - Family Leave Personal
 FLS - Family Leave Sick
 HOL = HOLIDAY
 HWP = HOLIDAY WORKED PAID
 JDC = Jury Duty

NOP = NO PAY
 OAB = OTHER ABSENCE
 OST = OVERTIME STRAIGHT
 OTP = OVERTIME + TIME & 1/2
 PLU = PERSONAL LEAVE UNPAID

PLU = PERSONAL LEAVE UNPAID
 PLU = PERSONAL LEAVE UNPAID
 PTO = PERSONAL TIME OFF
 REG = REGULAR HOURS WORKED

SDC = SNOW DAY CLOSING
 SKO = SICK PAY
 UWA= United Way Day Off
 VAC = VACATION

**CHESTER COUNTY
DEPARTMENT OF EMERGENCY SERVICES
MEMORANDUM**

To: Valentino F. DiGiorgio, III, Controller
From: Edward J. Atkins, Colonel, USAF (Retired)
Director
Subject: Draft Performance Audit of the Department of Emergency Services
Date: 21 April 2009

Thank you for the opportunity to review and comment on the draft of the Performance Audit of the Department of Emergency Services. It is somewhat difficult to completely respond in two weeks to a document three months in the making. Still, below are my thoughts on the document. I appreciate the dialogue with Ms. Jones concerning our misunderstanding of the operation of the proposed 8 hour schedule.

II. Organizational Structure

1. I disagree that the Deputy and Assistant Directors are inappropriately titled. In many other counties the operating divisions in the Chester County Department of Emergency Services (DES) are their own department. Each Deputy and Assistant Director has their own organization to lead, their own budget, and many times their own funding stream. Each Deputy and Assistant Director is responsible for establishing their own policy, in consultation with me and with my approval.
2. "It should be noted however, that prior to the appointment of the current DES Director in 1997, these Deputy Director positions were titled "Manager".
 - a. This is absolutely true. The changes were made for the exact reasons stated above. The title changes and organizational restructuring occurred with the full knowledge of the Board of Commissioners.

III. Public Perception (First Responders)

1. "Local law enforcement and first responders have expressed concern that DES leadership has not adequately solicited them with respect to matters related to their respective departments and organizations".
 - a. I believe sufficient effort is put forth to solicit the opinions of the first responder community.
 - b. There are 52 fire departments, 23 Emergency Medical Services (EMS) organizations, 45 police departments, and 73 emergency management agencies DES provides service to every day. It would be impractical, inefficient and cost prohibitive for DES leadership to directly consult every one of these 190+ agencies regarding every issue that may impact them. In order to ensure efficient, economic, productive and timely progress on issues DES interfaces with the recognized representative organizations. Every discipline (Police, Fire, EMS, and

Emergency Management) has a representative organization. DES leadership attends the meetings of these organizations on a regular basis, provides regular reports on DES activities and issues, and fields a host of inquiries at every meeting. DES' attendance at these meetings also ensures we are sensitive to the issues these agencies face and offer assistance and solutions to help them address issues.

- c. The Chester County Fire Chiefs Association holds an Advisory Board meeting with representation from the Main Line Fire Chiefs Association, the Northern Fire Chiefs Association, the Western Fire Chiefs Association and the Southern Fire Chiefs Association the third Thursday of every month. The Deputy Director for Fire Services attends this meeting. The Chester County Fire Chiefs Association holds a regular membership meeting where representatives from all 52 fire departments, including current and retired chief officers, may attend on the first Thursday of every month. The Deputy Director for Fire Services, Chief Fire Marshal, Deputy Chief Fire Marshal, and Fire Training Coordinator attends this meeting as well. I attend as many of these meetings as my schedule allows.
- d. The Chester County Police Chiefs Association holds a Communications meeting the first Wednesday of every month. The Deputy Director for 9-1-1 Operations, the Deputy Director for Technical Support, the Assistant Director for External Liaison and Public Information, the Law Enforcement Data Coordinator, and various Technical Division staff members attend these meetings. The Chester County Police Chiefs Association holds a regular membership meeting the second Wednesday of every month. The Deputy Director for 9-1-1 Operations, the Deputy Director for Technical Support and the Assistant Director for External Liaison & Public Information attend this meeting. Again, I also attend both of these meetings as my schedule allows. To further enhance communication with the Law Enforcement Community, I have invited the District Attorney's Law Enforcement Liaison Officer to attend the weekly DES Executive Staff meeting where he is briefed on happenings in DES, consulted in the decision making process, and provides input and feedback on behalf of the law enforcement agencies in Chester County.
- e. The Chester County EMS Council, Inc. holds quarterly meetings of their Board of Directors and the Council. I (schedule permitting), the Deputy Director for Field Services and most members of the Field Services Division attend these meetings. There are also quarterly committee meetings supported by Field Services Division staff. The Medical Advisory Committee is a meeting of all the County Medical Command Hospitals, agency Medical Command Directors and agency coordinators. This meeting is attended by the Advanced Life Support (ALS) Coordinator and supported by the Data Coordinator. The Operations meeting is an opportunity for all services to bring issues regarding operations to the Council. This meeting is attended by the Basic Life Support (BLS) coordinator.
- f. The Chester County Local Emergency Planning Committee (LEPC) includes representation from chemical facilities in the county, emergency response organizations, residents, and emergency management coordinators. The members of the LEPC are appointed by the Commissioners. This meeting is held quarterly and attended by me (schedule permitting), the Assistant Director for External

purchases approved in advance by the Chester County Commissioners prior to any Homeland Security, or PEMA monies being expended.”

- a. Meeting with the emergency response organizations is a very good idea. That is why we do it already and have been doing it for the 12 years I have been Director.
 - b. The first part of this recommendation is further addressed in paragraph III. 1.
 - c. All PEMA grants are already approved by the Chester County Commissioners through the normal Sunshine process.
 - d. Homeland Security purchases funded through the Chester County allocation of the State Homeland Security Grant Program (SHSGP) are approved by the SEPA RTF and then approved by PEMA provided the equipment requested is on the federal “allowable equipment list”. The commissioners are copied on the correspondence at Attachment 1.
4. “...some in the first responder community have stated that DES does not place the required emphasis on pressing matters involving their safety – namely the persisting problems with the 800 MHz radio system, and the re-banding process.”
- a. Again, this simply is not true. I place safety as the number one priority in all matters, especially responder safety. This is especially important to me as I have been shot at on numerous occasions. I face constraints beyond my immediate control in fully addressing issues, including but not limited to the Federal Communications Commission (FCC) mandated rebanding order. I established the System Continuity Plan and had it approved by the Commissioners to progressively and cost-effectively update key systems to keep technology current. The rebanding order forced this program to be placed on hold because of staff constraints. As the report indicates, rebanding is failing miserably. This failure is not limited to Chester County, it is nationwide.¹ DES has worked hard to comply with the rebanding order while protecting the interests of the emergency responder community and the fiscal interests of the citizens of Chester County.
 - b. In addition to the rebanding order, another constraint DES faces outside its control is that some in the emergency responder community willfully fail to comply with DES instructions on system operation. Some emergency responders refuse to use specified equipment such as appropriate sized antennas on their vehicles and portable radios. Some emergency responders also fail to provide the necessary information in a timely manner to investigate reported problems. Instead of providing productive information we are provided comments such as “the radios are unusable”. Some responders also fail to provide timely access to equipment for service, fail to follow recommended service intervals such as battery conditioning, and alter radio programming themselves without the approval of DES.
 - c. Additional evidence of DES’ commitment to ensure responder safety and efforts to address radio system issues can be found in a meeting held on 13 January 2009 with DES leadership, Commissioner Aichele, and the President of the Fraternal Order of Police (FOP). Since that meeting, information has been supplied to the

¹ Gurs, Robert. “Rebanding Troubles” Public Safety Communications. March 2006.

FOP on a regular basis regarding issues with the radio system. In Attachment 2 are slides describing radio issues. The average of the last three months has shown 0.051% of the time there are issues. This means 99.949% of the time there are no issues. I work diligently with emergency responder leadership to maintain this high level of success.

5. “According to the DES Director, the reason for the delay is 3-fold:...”
 - a. I agree with this statement, with the following observations:
 - i. “Time spent in litigation” – Our rebanding process never reached litigation, we went through a mediation and negotiation process.
 - ii. This section is written as though the rebanding delays are my fault and this is far from accurate. I have cooperated and complied with all requests for information from Sprint Nextel, the Transition Administrator, and the FCC. I have followed the rebanding order; however have experienced significant issues with Sprint Nextel. Sprint Nextel’s unwillingness to follow guidance set forth by the FCC and the Transition Administrator has caused many of the delays that have been experienced in Chester County. EF Johnson, the radio system supplier, and their inability to provide safe and appropriate radio equipment has contributed also. I demanded appropriate resolution of these issues in the best interest of the emergency responder community and the fiscal interests of the County of Chester. If I did not insist on reimbursement allowed by the rebanding order, the County would have incurred \$367,000 of unnecessary cost.
 - iii. The actual rebanding process will not start until completion of the frequency reallocation agreement negotiations at a cost to Sprint Nextel of approximately \$20 million. The current estimate for rebanding completion is 2013.

IV. 911 Center Staffing and Shifts

1. “Internal Audit questions whether the considerable expense of paying overtime is sufficiently justified by the purported benefits of using 12 hour shifts. Indeed law enforcement has confirmed to Internal Audit that 12 hours is a long time to stay focused...”
 - a. Research disputes this assertion. A 1999 report published in the *Occupational & Environmental Medicine*, an international peer reviewed journal concerned with areas of current importance in occupational medicine and environmental health issues throughout the world, found that the only relevant factor was a 24-hour rest period between the day and night shifts.²
 - b. In an April 1998 article in *Occupational & Environmental Medicine* titled “Work shift duration: a review comparing eight hour and 12 hour shift systems” stated, “The bulk of the evidence suggests few differences between eight and 12 hour

² Tucker, P, Smith, L, MacDonald, I, Folkard, S. “Distribution of rest days in 12 hour shift systems: impacts on health, wellbeing, and on shift alertness”. Occupational & Environmental Medicine 56(3): 206-214.

shifts in the way they affect people. There may even be advantages to 12 hour shifts in terms of lower stress levels, better physical and psychological wellbeing, improved durations and qualities of off duty sleep as well as improvements in family relations”.³

2. “All departments, especially during these economic times, should be looking for ways to save the county and its taxpayers, money. By reducing the duration of each shift from 12 to eight hours, from increasing the number of shifts (from two 12 hour shifts to three 8 hour shifts) and using a ‘scheduling pattern’ similar to the one used at the County Prison, the County could reduce its annual payroll cost by at least 15% (or a minimum of \$252,000) if the platoon staffing levels remained at 15. Internal Audit should point out that this figure is merely an *estimate* based on average hourly rates and a normal schedule.”
 - a. The proposal presented by Internal Audit could save money, but even if augmented to satisfy required staffing on the floor, would reduce the quality of service provided to the citizens and emergency responders. I continually keep in mind the end result must be, efficiently and economically, to promote and help provide for the safety and security of the public at a level demanded by the emergency responders’, elected officials’ and citizens’ expectations.
 - b. I need 15 people on-duty to carry out the essential functions in the 9-1-1 center. Experience shows 5 calltakers are required for appropriate call handling and processing, breaks and on-shift training. Each of the 6 radio districts (3 Fire/EMS, 3 Police) must have a dedicated dispatcher to ensure the appropriate attention and responsiveness to emergency responders and provide for their safety. Two scope operators are needed to allow police dispatchers to take breaks, monitor and dispatch calls to areas covered by the Pennsylvania State Police (PSP), and handle time-sensitive, confidential law-enforcement information. Two supervisory personnel are needed to allow one to monitor incidents and activities and provide assistance to telecommunicators and another to manage the day-to-day administrative functions of the 9-1-1 center and management of personnel.
 - c. Internal Audit’s proposed eight hour shift schedule lists 18 people per platoon or a total of 54 telecommunicators. The Association of Public Safety Communications Officials (APCO) - International “Communications Center Staffing Formula”⁴ (Attachment 3) is the industry standard and shows we need 20 telecommunicators per platoon to ensure the required 15 positions are staffed, regardless of 12-hour or 8-hour shifts. Internal Audit’s proposed 8-hour schedule is made even more impractical by scheduling 5 or 6 telecommunicators of the 18-person platoon off at any given time. To staff our required 15 positions would require 24 hours of telecommunicator overtime per week. Any use of benefit time off, such as vacation, holiday and personal time, would also require overtime to

³ L Smith, S Folkard, P Tucker, and I Macdonald. “Work shift duration: a review comparing eight hour and 12 hour shift systems”. *Occupational & Environmental Medicine* 55(4): 217-229.

⁴ Hagstrom, Jennifer. “How Many Do We Really Need? A Simple Formula for Determining Staffing”, *APCO BULLETIN*, September 2000.

ensure 15 telecommunicators on duty at all times. When we combine the number of overtime telecommunicators needed to simply meet required staffing levels with the number of overtime telecommunicators needed to allow others to use their benefit time I am concerned that the mandated overtime and the resultant shortened amount of off time will result in a decrease of efficiency and service to the citizens and emergency responders.

- d. According to an article published by the *Police Officers Association of Michigan Journal*, “sick leave has been reduced in many departments utilizing the 12-hour schedule...Figures reflect that while sick hours tend to drop a nominal amount, the number of incidents using sick leave decreased substantially more”.⁵ Utilizing Internal Audit’s proposed schedule there simply would not be enough available personnel to cover sick time. This lack of available personnel would require telecommunicators to stay over until a replacement arrives. In other centers this has led to mandating employees to cover shifts, which leads to decreased morale and increased turnover.⁶
- e. Such shifts also promote a fragmented workforce where the staggered work times result in a continually changing staff reducing the group’s efficiency. Currently, there is a cohesiveness that significantly contributes to the efficiency of platoons in handling high-stress emergencies. This is evidenced by a number of commendations from emergency responders and through the Quality review process where the team-work of a platoon led to more efficient handling of emergencies. The cohesiveness also contributes to platoon members’ ability to deal with high levels of stress in a productive manner. The bonds that are created allow platoon members to confide in each other and assist each other through difficult times both personally and professionally. The staggered shift patterns proposed by Internal Audit would destroy this cohesiveness.
- f. Internal Audit’s proposed schedule creates a need to mandate overtime. I am concerned by this practice because of the negative impact on morale and employees’ personal lives.
- g. The current twelve hour shift schedule provides rotating weekends and holidays off, providing equitable time off for all staff. The eight hour shift leads to preferred shifts being taken by senior telecommunicators leaving the least preferred shifts to newer staff. The eight hour shift also creates a scheduling split between experienced and less experienced telecommunicators. This split means less experienced telecommunicators will not be able to benefit from the experience of senior telecommunicators. This, from research, leads to higher turnover rates and lower morale. If this course is taken we can expect increased turnover by newer staff and increased complaints by responders.⁷

⁵ Jacques, Ed, “A Fresh Look at 12-Hour Shifts”, *The Police Officers Association of Michigan Journal*, <http://www.poam.net/main/journal/fresh-look-at-12-hour-shifts.html>. April 13, 2009.

⁶ Folger, Paul, “911 Dispatchers Working Overtime Due to Worker Shortage”, KOCO Channel 5 Oklahoma City, September 28, 2008.

⁷ Vega, Arthur; Gilbert, Michael J. “Longer days, shorter weeks: compressed work weeks in policing.” *Public Personnel Management*, Vol. 26, 1997.

- h. Internal Audit’s proposed schedule also significantly reduces our capability and capacity to provide service. We are simply forced to do less with less. The proposed 8-hour schedule and subsequent increase in mandatory overtime requirements and resulting decrease in time off creates:
 - i. a dangerous situation where there is no staff rested and available to assist during major events. This means we will be unable to meet the American National Standards Institute (ANSI) standard of handling a 10% increase in call volume.⁸ We will also be unable to sufficiently staff COMM-1 (the mobile communications unit).
 - ii. a situation of being unable to provide public education which is an industry standard and best practice and a cornerstone of our mission statement.⁹
 - iii. a decrease in the ability to meet increasing citizen and responder expectations.
- i. Additionally, using the proposed 8-hour schedule we would be forced to create additional full-time training positions. Moving to the proposed 8-hour schedule would mean telecommunicators that currently provide instruction in the training programs for new personnel would work their entire time off in the 9-1-1 center and be unable to continue to be utilized in the training program. The 2 additional full-time positions would, at a minimum, cost \$37,222 each¹⁰, or a total of \$74,444. The added cost of benefits would drive this cost up an additional 36% per employee or \$13,400. The total cost for these two added positions would be \$101,244. The training program quality would decrease because the instructors would not have current first-hand knowledge and experience of working the job.
- 3. “Potential savings estimated above are actually understated since they do not consider work schedule exceptions. In fact, as shown in table 4-1, actual overtime payments for the past six years have been much higher - \$467,000 to \$697,000. Based on the foregoing...expected savings would be more than our estimated amount.”
 - a. This statement is incorrect and misleading. As noted in 2b, 15 telecommunicators are required; however the 8-hour provided schedule does not provide the minimum number of telecommunicators on-duty. In addition, the calculations do not account for the use of vacation, personal, holiday, sick time, mandatory meetings and training. Further, the assumption is that no major events occur which require the response of COMM-1 and that Public Education efforts be discontinued.
 - b. Using Internal Audit’s provided schedule, 54 telecommunicators with an average hourly rate of \$19.55, the use of vacation (16 days average); Holidays (11 regular

⁸ “Public Safety Answering Point (PSAP) Service Capability Criteria Rating Scale”, Association of Public Safety Communications Officials (APCO) – International and National Emergency Number Association (NENA), The American National Standards Institute (ANSI), APCO/NENA ANS 1.102.1-2008, November 3, 2008.

⁹ *Standard Guide for Establishing and Operating a Public Information, Education, and Relations Program for Emergency Medical Service Systems*, ASTM International, Committee F30, Subcommittee F30.03, Standard Number 1268-90 (2003).

¹⁰ Based on the County of Chester 2009 Pay Rates, E01 Minimum Salary.

and 3 floating); personal time (3 days); the overtime estimated is \$418,057. At a minimum, each telecommunicator must attend 10 hours of hands-on training and average 12 hours in meetings. The overtime estimate for minimum required training and meetings is \$34,838 bringing the estimated overtime, without sick days, major events and discontinuing Public Education to \$452,895.

- c. Ensuring appropriate on duty staff, for “normal conditions”, would require eight hours of telecommunicator overtime on each shift rotation or 24 hours of overtime every week. Using the report provided average rate of \$19.55 plus time and a half this would result in \$36,598 in overtime each year.
 - d. Using the 2008 actual overtime of \$537,517, which includes overtime for major emergencies, sick time, Public Education and training above the minimum means the proposed schedule would result in a minimum overtime cost of \$489,493 or a decrease in overtime costs of \$48,024. One must remember, this decrease in overtime does not account for major emergencies, the use of sick time or Public Education events.
 - e. During 2008, COMM-1 was in service for 263.75 hours. The minimum required staffing for this unit is two telecommunicators. Again, using Internal Audit’s proposed schedule, this would result in \$15,469 in overtime costs.
 - f. The proposed schedule would actually result in a total overtime cost of \$504,962 (still not accounting for sick time usage or public education) or, when compared to 2008’s actual overtime costs, a decrease of \$32,555 in overtime.
 - g. Each full-time county employee accrues sick leave at the rate of 12 days a year. If each telecommunicator used only 6 sick days the overtime cost would be \$76,010 resulting in an increase in overtime cost of \$43,445.
 - h. Not only would Internal Audit’s proposed schedule actually cause an increase of overtime expenditures it would also cause a reduction in service and quality by decreasing the number of telecommunicators below the minimum required levels, reducing training and eliminating public education.
4. “The purported need to increase each platoon’s staffing level to 18 should be closely scrutinized. Current staffing levels provide at least seven people to answer incoming calls. This number does not include the six dispatchers or two scope employees but does include the two shift supervisors. It would appear that for “normal conditions”, this current staffing should be sufficient. During extenuating circumstances or states of emergency, additional manpower could be called upon as needed...”
- a. This statement is misleading and incomplete. First, this section does not account for the need to have a fourth police dispatch position. The fourth police dispatch position is being planned to be placed in service when staffing levels meet our approved staffing. This fourth police dispatch position has been requested by the law enforcement community, citing safety concerns. I find it strange indeed that in other places, Internal Audit suggests DES defer to the opinions of law enforcement, yet in this case DES is criticized for agreeing with a law enforcement request.

- b. Secondly, DES does not have the luxury of being forewarned about extenuating circumstances; therefore increased staffing is the standard to meet these needs. The ANSI “Public Safety Answering Point (PSAP) Service Capability Rating Scale” sets as a Superior Criteria for staffing as applied to critical incident situations the following: “With an increase greater than 10% in normal call volume, the PSAP has adequate staff and maintain service levels to meet a 90/10 benchmark...”⁸ Staffing levels are designed to meet the daily requirements of the citizens. A reduction of staffing levels would cause Chester County to not meet the Superior rating and result in a decrease in service levels.
5. “To further support our position, we call attention to the fact that DES records for January through November 2008 indicate that quality assurance ratings for the 911 center surpassed PEMA Standards in all areas.”
 - a. I believe the citizens would rather have us exceed standards than fail to meet standards. We exceeded standards by having, at a minimum, the required 15 telecommunicators on-duty. This statement makes the assumption that changing a variable does not affect outcome.
 - b. To further support our position that a reduction in staffing will significantly decrease our service levels and capability, I point out the year 2003. In 2003 we had our highest overtime cost of \$696,548.42 because of a significant lack of staff. We had one platoon with 14 employees, two platoons with 13 employees and one platoon with 12 employees. This staffing is just under the number of authorized positions Internal Audit purports we need. The average number of seconds it took to answer a 9-1-1 call was 7, compared to our current 1. The quality scores were some of the lowest, despite still surpassing PEMA standards and the number of complaints and errors were some of the highest in the 12 years I have been with DES. In contrast, 2005 had the lowest overtime cost of \$466,988.58 with 18 more telecommunicators on staff than in 2003. In addition, we maintained an average seconds answered of 1, had high quality scores and a relatively low number of inquiries and errors.
6. “Lastly, Internal Audit learned that the County’s 911 center originally operated on an 8 hour schedule until a committee of 911 employees petitioned for the change to 12 hour shifts. Internal Audit believes ‘built-in’ overtime was one of the driving forces behind this change request.”
 - a. This statement is wrong. The change to 12 hour shifts was made when the communications center moved from the Hazlett Building to the GSC. The change was made to adequately staff as the County deployed 9-1-1. While the telecommunicators were asked for input and agreed, the need and desire to implement 12 hour shifts came from management.
7. “To summarize, Internal Audit believes that by changing the duration of the county’s 911 shifts from 12 hours to 8 hours, annual overtime expense for DES could be reduced by 60-70%. In addition, Internal Audit has determined that plans to increase 911 staffing levels may be unwarranted at this time...Quality assurance reviews indicate that shifts comprised of 15 calltakers and dispatchers provide ample coverage and quality service during normal conditions.”

- a. This reasoning is faulty. The assumptions take for granted that
 - i. Everyday is “normal conditions”
 - ii. That only those staff assigned to a scheduled shift worked
 - iii. And, that no staff takes vacation, sick time, personal time or are assigned to training.

These assumptions are incorrect and did not consider the actual number of staff working, increased call volume due to major incidents or the need to deploy a fourth police dispatch position.

- b. Having 15 telecommunicators on duty during “normal conditions” does provide ample coverage. Having 15 on duty takes into account the full platoon staffing allowing for vacation, sick and training time off or the need to have additional capability to respond to increased call volume. On the surface, less people should mean less money, however, the additional staffing for 12 hour shifts eliminates the need to mandate overtime, maintains high standards, and provides realistic time off and the ability to respond to a surge in volume.
- c. The assumption that overtime costs could be reduced by “60-70%” is incorrect and based on the idea that telecommunicators do not use their vacation, personal, holiday or sick time and that they do not attend mandated training and meetings. Internal Audit’s proposed schedule actually results in an increase in overtime expenses because they failed to employ necessary planning assumptions.

V. Timekeeping and Payroll Process

1. We tried Kronos but found it cost prohibitive and other County departments were unable to support this implementation. I believe this should be explored to present a suitable solution for the County as a whole. It is important to emphasize the importance of the 24-hour departments in the County when exploring this option.
2. I note this Audit does not reference DES requests for policies and procedures regarding timekeeping and the documentation of payroll. I find it almost impossible to adhere to non-existent policies and procedures that are in a constant state of flux with no apparent reason for change. The response in an e-mail by the Payroll Manager regarding DES’ request for policies and procedures is as follows: “Just not enough hours in the day. A Procedure Manual is well into the future”. I believe a procedure manual should be a top priority to ultimately reduce errors, cost and liability.
3. I have no problem submitting a timesheet.

VII. Homeland Security Purchases

1. I am very mindful when making purchases of ways to reduce the overall cost to the taxpayer. One of the commonly accepted government practices is to take advantage of economies of scale. When DES makes purchases we try to make them in bulk to stretch the dollar the furthest possible while still getting a quality product that will support the emergency responders when the time comes.
2. I am also reminded that we do not have very many large scale incidents, however when we do they are resource intensive and require a lot of the equipment and supplies that are

purchased and stored. I believe it is my job to be proactive, not reactive and I take this responsibility very seriously in all aspects of readiness.

3. “According to DES, such training has not been completed in its entirety because funding has run out.”
 - a. I acknowledge the excess materials that are kept in storage, however I also understand the dangers of distributing equipment without proper training. Training was unable to be completed for several reasons, including:
 - i. Training and maintenance was not funded by the SEPA RTF in 2007 and 2008.
 - ii. Volunteer responders are sometimes unwilling to attend training because Department of Homeland Security (DHS) guidance forbids reimbursement of volunteer time. DHS guidance allowed reimbursement of paid responders such as Police Officers and ALS providers however did not allow DES to reimburse a volunteer that had to take time off work to attend the required training.
4. “Internal Audit recommends that a listing of what is being held in storage be provided to police, fire, and EMS representatives to peruse, act upon, and finally claim. Without knowledge of what they currently have, first responders could inadvertently order something that they already have, creating an overabundance and a waste of governmental funding.”
 - a. I have worked with leadership of the emergency service organizations to ensure they have adequate and appropriate amounts of equipment. I have also made it known to the emergency service organizations that replacement equipment is available when it is used. The equipment that is kept in storage is meant as a back-up to equipment that has already been distributed to ensure an adequate supply and the ability to quickly replenish. A good example of this is when a tour bus overturned on the Pennsylvania Turnpike on 4 May 2007. Elverson EMS used 40 triage tags and a tracking board which were replaced less than 24 hours later.
5. “A large number of educational pamphlets and booklets intended for public awareness that have not been circulated.”
 - a. I purchased such a large number of public education materials to reduce the cost per unit and because there was limited funding that was not expected to be made available in the future.
 - b. Of the 50,000 full-color brochures just recently purchased, 21,000 have been distributed. The remainder will go to Fire Departments, Police Departments, Municipalities, Schools and local Wawa’s.
 - c. Additional educational materials in storage are used as requested by groups and when DES goes to public outreach events such as the Kennett Mushroom Festival.
6. “Updated versions of the MDC mobile laptop computers which have not yet been distributed / installed in police and fire vehicles”.

- a. These MDCs were purchased in 2007 as spare units so when a computer needed repairs a police car, fire truck or ambulance could continue to benefit from the MDC. If it is the opinion of the emergency response community there is not a need for spare MDCs and should instead be installed in vehicles in-service, I will make this happen.
 - b. It should be noted that MDCs were made available to be installed in every patrol police car, police station and ambulance in Chester County. Only a limited number of fire trucks at every fire department have a MDC. The decision which fire apparatus was to receive a MDC was made by the Chief of each Fire Department, not DES. There is no Fire Department in Chester County that does not have at least two MDCs.
7. “Items that were sent to the County in error but deemed less expensive to keep rather than send back to the vendor”.

The decision “to keep rather than send back to the vendor” is one made by the vendor. The items sent in error included incorrectly sized apparel, incorrectly sized patches, etc. The corrected items were sent and distributed, however the incorrect equipment items were placed in storage. It is also important to note that the errors did not cost Chester County or the SEPA RTF any money. I will ensure, in the future, that incorrect equipment is disposed of properly if the vendor does not want it returned.

8. “Items that were purchased in large quantities (HAZMAT suits and mask cartridges) that have or will shortly surpass their shelf life and will no longer be useful”.
- a. I recognize the benefit of using suits and mask cartridges that have surpassed their shelf life in training and exercises. This reduces the cost of replacing “good” equipment and extends the useful value of expired equipment.
 - b. We have a disposal plan to dispose of the bulk of the expired equipment.
 - c. There is no available funding to replace much of the expired equipment. We are formulating plans, in conjunction with the emergency responder community, to use County allocated DHS funding to replenish the needed supply.
 - d. I call your attention to the fact that DHS and PEMA did not have a policy on disposing equipment purchased using grants until 25 February 2009. This policy is attached as Attachment 4.
9. “It is important to note that the County of Chester spent approximately \$15,000 for the DES storage facilities in 2008”.
- a. This is true. I see an increase in that amount in the coming months. Keeping in mind economies of scale and the need for additional storage space because of additional vehicles and trailers purchased using DHS funds and space needed for rebanding equipment staging, DES is investigating a larger warehouse style storage facility that will increase the available square footage and reduce the cost per square foot. We are also investigating ways to offset this cost using allowable rebanding funding.
10. I am surprised that the emergency responders who were interviewed forgot to mention the most recent example of their involvement in Homeland Security purchases connected

with the design of the new communications unit to support emergency responders. We began the planning process for the new COMM-1 in the Fall 2008. Leadership from the Police Chiefs Association, Fire Chiefs Association and EMS Council, Inc. have been invited to our design meetings beginning in January 2009 when we began designing operational components that would directly impact and benefit their disciplines. The District Attorney's Law Enforcement Liaison also attends.

VIII. Rebanding

1. "...however DES will still have the same obsolete analog system and 'dead zones'...".
 - a. Of course we will have the same system. The goal of rebanding, based on FCC guidance, is to shift frequencies, not replace systems. The fact that there will be "dead zones" is nothing more than a simple restatement of the laws of physics. No matter what kind of radio system is in place, there will be "dead zones". It is impossible to ensure 100% coverage 100% of the time regardless of the number of towers, type of radio system, and manufacturer of equipment. A number of factors affect radio propagation including, but not limited to, topography, atmospheric conditions, elevation, building construction materials, vehicle design, weather conditions and operator proficiency.
2. "It would not be prudent to spend that kind of money for a new radio system that will again fall short and leave our first responders at risk because their communication system did not function properly."
 - a. The option to not procuring a new system is to let the current system die. There is no more equipment available for the existing radio system. A new system will be required. As with everything DES does, the best possible solution will be installed given the constraints of the laws of physics and prudent spending practices.
3. "The County has resorted to purchasing used parts off eBay to help 'buy some time'."
 - a. This statement is close, but not entirely true. We have not purchased any equipment off eBay. We have purchased used equipment from other counties in the country to provide essential spares while we complete re-banding and install a new system.

IX. HAZMAT Responses

This is a very good idea and I look forward to working with your office, the Commissioners, Human Resources and other departments to implement this recommendation.

X. Other Matters

A. Public Safety Training Facility

1. It is important to note that at this time, we have informally worked to reach agreement with East Fallowfield Township on condition 1 & 2, training time and police station, respectively. The significant improvements to be made to the intersection around the facility site continues to be a major delay in moving forward with this much needed

facility for our emergency responders to be able to safely and efficiently train intra- and inter- disciplinary.

2. In light of the complaints that I do not consult emergency response leadership, I am reminded of the Public Safety Training Facility and the tremendous amount of involvement emergency response organizations have had in the design of this facility through design meetings, questionnaires, and open discussion during public meetings and their own Association meetings.

B. Spending

1. I have already curbed out of area travel and only allow such travel when approved by the Commissioners upon recommendation by me that attendance is critical to operations. This practice was done in accordance with direction by the Commissioners on 13 November 2008.
2. I reject the idea that meals should not be provided unless “attendees are paying a fee for the event which will offset the cost of the food”. Modest meals are provided to volunteers attending meetings immediately after work during dinner time which last until late evening. I do not deem it fair or appropriate to ask a volunteer to pay for a meal while performing a service for the health, safety or security of the citizens of Chester County.

C. Certified Training Officers

Again, this is an excellent recommendation and I will work with Human Resources to implement.

I do wish to note the statement “CTO’s have the responsibility of shadowing new call takers when they are first assigned to the radio room” is misleading. The CTO’s are members of the training program. Their duty is to monitor calls taken by trainees while ensuring that the level of service does not decrease. The CTO completes forms on every call taken by their student and reviews each call at its conclusion. At the end of each shift, the CTO completes a Daily Observation Report (DOR) which is provided to and discussed with the on-duty supervisor.

D. Employees with Multiple Jobs

Yet another excellent recommendation that I look forward to helping to implement to ensure a timely and cost efficient process.

E. Work Environment

I regret that my enthusiasm for action may have been stated too strongly. It is unfortunate that this error has overshadowed many other very positive work environment improvements.

XI. Inquiries and Comparisons with other Counties

1. I explained in paragraph III, 3, d that I believe the present procedure for SHSGP purchases are adequate. Any more complex and time consuming procedure could preclude Chester County emergency responders from the benefit of equipment opportunities with soon to expire funds. In any event, Berks County does not receive

Urban Area Security Initiative (UASI) funds since they are not in a designated Urban Area.

2. Berks County is a poor comparison because they operate differently, have different citizen and responder expectations. In addition, the new Director of the newly created Berks County Department of Emergency Services has requested to visit Chester County so he may gather information for his department to implement industry accepted best practices.

XII. Fraud Hotline

I request that future occurrences of this nature be more quickly communicated to me so I may take appropriate action.

General Comments

1. This report focuses only on hearsay and negative issues and fails to highlight the true breadth and depth of DES. This report also fails to highlight the hard work and dedication the men and women of DES put forward every day, working to make Chester County a better place to live and work.
2. I am confident that the statements attributed to emergency responders in this report are that of the few, not of the many. It is further evident how difficult it is for those not involved in emergency services to understand our business and our operating needs. I have produced during our audit and in this response factual documentation to disprove allegations made.
3. It should also be noted, as described to Internal Audit, that DES is looked to as a model of best practice, locally, regionally, statewide, nationally and internationally. On a regular basis agencies are calling or spending public funds to send representatives to DES to learn how we operate and how we are structured. We have hosted representatives from many states, including several large metropolitan areas such as Fairfax, Virginia, New York City, and Los Angeles, California. We have also hosted representatives from Iceland and Qatar who have built their 9-1-1 systems from our operation. DES is also visited regularly by The Council for Excellence in Government Fellows program as a best practice in Building Partnerships and Coalitions.
4. The 2008 Chester County Citizen Survey conducted by Franklin & Marshall College, DES was ranked the highest in citizen satisfaction.

4 Attachments

1. Correspondence
2. Slides
3. Staffing Formulas
4. PEMA Equipment Disposal Policy

cc: Mark Rupsis

Attachments available upon request.

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