

Memorandum
City of Lawrence
Police Department

To: Tarik Khatib, Chief of Police
From: Daniel Ward, Captain Information Services
Cc: Diane Stoddard, Assistant City Manager
Cynthia Wagner, Assistant City Manager
Casey Toomay, Budget Manager
Date: March 2, 2012
Re: Information Technology Budget

BACKGROUND:

The Information Technology Division of the Lawrence Kansas Police Department is facing a multitude of critical issues that must be addressed in order to continue critical operations. Over the years, Information Technology has expanded rapidly throughout the department. The systems and products which have been put in place have made our organization and employees more efficient and effective, however, it has also made us dependent upon the technology. Today police officers utilize some form of computer technology to complete virtually every function of their job. Police reports are written, submitted, approved, and sent to the State by electronic means. They use the computer system to update calls and look up case related information. Today the computers have become as important as the radio for officers. The Municipal Court and District Attorney's office has also become heavily reliant upon our computer system to automatically disseminate reports for prosecution. Recently the department's web page has been revamped and we are providing increasingly more information to the public through our electronic communications. The staff of the Lawrence Police Department is also more dependent upon computer technology as we rely on this technology for critical performance measures and the deployment of resources.

The Information Technology Division consists of a civilian manager, two full time civilian employees, a part time intern, and one officer temporarily assigned to address MDC's. These few individuals maintain 166 computers (laptops and desktops) and 40 MDC's which are used daily. Additionally they maintain approximately 30 virtual and physical servers as well as a several switches and a wireless connection between the two buildings. The maintenance of critical hardware has been postponed due to funding issues and the lack of

manpower to accomplish the upgrades. In order to accomplish the minimum amount of work to “get by”, we rely on sworn personnel to supplement our staffing. There are also several orphaned IT projects which are not supported by IT staff due to the lack of manpower. Those projects include the ITC exchange server, electronic ticketing, ACISS, and Boss ALPR. Currently, we have a Sergeant, two detectives, and an officer who continually assist the Information Technology Division. In fact, most if not all of the Information Technology support at the Investigations and Training Center is handled by sworn personnel who work out of that building as none of our IT staff are assigned there.

PRESENTATION OF DATA

On any given day there are approximately 80 open Help Desk tickets, some dating back to 2005. The Information Technology Division is unable to provide service to the end users in an acceptable period of time. As the systems age and the network continue to grow, this will only worsen.

The annual operating budget for the Information Technology Division includes \$19,700 for software and \$40,888 for equipment under \$5000. This amount simply covers the costs of some of the most basic emergency repairs and is in no way adequate to address the overall issues facing the Information Technology Division. In the past we have relied heavily on grants and one time funding options to make initial purchases. When that is done, there is never any consideration made for sustaining and eventual replacement as the equipment ages. Most of our computer equipment is in dire need of replacement and/or upgrades. The in-car camera systems continue to fail at an alarming rate. The systems will be four years old and will be going out of warranty in December of 2011, which will increase our costs for maintenance dramatically. Replacement of the in-car camera system will be required within the next year.

We have a total of 41 Mobile Data terminals. Of those, nine will run out of warranty in 2011 and 24 will run out of warranty in 2012. As with the in car video systems, the costs associated with these units will continue to increase and a replacement schedule should be adopted.

The Digital Imaging Scanners used to enter written product into the electronic files were installed nine years ago. This is far past the industry standard. While the move to KLER electronic reporting will reduce the number of documents scanned, it will not eliminate all written documents. New scanning workstations should be built to replace these aging units before they fail all together.

We are experiencing more and more issues related to having adequate backup storage space. Officers and Detectives are retrieving greater amounts of digital information from photographs, computers, surveillance videos, and cell phones and this electronic information must be stored and backed up. This

explosion in demand for storage space requires us to either rebuild our current servers with new drives or new servers need to be acquired. Media storage space related to the in-car cameras is another issue. Another large server should be built or we will need to re-examine our video retention policy and make drastic changes.

There are four interview rooms at the LEC and four interview rooms at the ITC. The recording equipment in each of these rooms utilizes old DVD recorder technology. As these units fail, we are having trouble locating replacements as the technology is being phased out. New recording technology needs to be implemented before we begin losing critical interview information.

The Training Division at the ITC has a total of 14 desk top computers used to train recruits and officers. Those computers are over six years old and they are marginally operational at this time. All of the computers in the Training room need to be replaced as soon as possible.

The Firewall and Virtual Private Network should be addressed. New replacement servers for the firewalls at the LEC and the ITC have been purchased; however, they have not been built and installed due to the lack of manpower needed to do so. These are critical to the security of our network. Likewise, we have acquired the equipment and software to transition from the SQL 2000 to 2008 however we have not had the adequate manpower to do so. Additionally, all of our switches are between 5 and 10 years old. Newer faster switches need to be purchased to upgrade their access.

DISCUSSION

As outlined above, the current budget for Information Services and the current manpower is woefully inadequate and will lead to critical failure if not adjusted. The national standard for computer technology replacement is based on a minimal configuration and when repair is not feasible. To help make this determination, we have installed audit software that documents and analyzes the hardware and software on each computer in use. This should help reduce the cost of premature replacement. As a general rule, computers need to be replaced every 3-4 years, servers need to be replaced every 4-5 years, in-car camera systems need to be replaced every 3-4 years, and MDC's need to be replaced every 3-4 years. The replacement of the in-car camera systems is based on the fact that repair is not feasible due to the increased failures, discontinued replacement or support for the microphone packs, and the lack of remaining warranty.

BUDGET EFFECT/ FUNDING SOURCES

As stated earlier, the current budget for Information Services is inadequate. The departments overall budget has not grown over the past years

and there is no identified areas which could be cut. Grant funding or one time funding from the equipment reserve fund is not advisable. Both are a short term solution to a long term problem. Increasing the annual budget for Information Services is the only solution to address these long term recurring issues. Cost of replacing the in-car camera system alone is estimated to be approximately \$250,000. An estimated annual replacement schedule for computers and lap tops would cost \$41,000, MDC's \$78,000, and servers \$30,000.

RECOMMENDATION

It is recommended that the equipment under \$5000 budget for Information Services be increased by \$100,000 annually. While this would still be less than the estimated amount required, it would provide some relief. The \$250,000 replacement of the in-car camera system in 2013 is recommended to be funded by the equipment reserve fund. Additionally, the annual budget in 2014 should increase by another \$65,000 so incremental replacements can be done annually.

It is recommended the Information Technology staff be increased by two positions by 2013. These two positions would provide daily help to end users and address the help desk tickets. One person could be stationed at the LEC and the other at the ITC. This would increase our service to the members of the department and free up the current staff to address the aging infrastructure issues. It is also recommended the Lawrence Police Department does not add any new IT projects or functions until we are able to sustain the current systems in place.