

# NASSAU COUNTY LEGISLATURE

**Office of Legislative Budget Review** 

# A Report on the Department of Information Technology Technology Fund Expenditures

Eric C. Naughton, Director July 28, 2005



ERIC C. NAUGHTON DIRECTOR OFFICE OF LEGISLATIVE BUDGET REVIEW

NASSAU COUNTY LEGISLATURE

ONE WEST STREET MINEOLA, NEW YORK 11501 (516) 571-6292

#### **Inter-Departmental Memo**

- To: Hon. Judith Jacobs, Presiding Officer Hon. Peter J. Schmitt, Minority Leader All members of the Nassau County Legislature
- From: Eric C. Naughton, Director Legislative Budget Review

Date: July 28, 2005

Re: Review of Technology Fund Spending

The Office of Legislative Budget Review ("OLBR") was asked by Minority Leader Peter Schmitt to review the expenditures charged to the Technology Fund and to determine whether the spending was appropriate and carried out according to County policies and procedures.

In response to this request, OLBR has analyzed the expenses incurred by the Nassau County Department of Information Technology (DoIT) from the Technology Fund and any related expenses. It was determined that in order for our report to be complete, it was necessary to review both the \$20.0 million Tech Fund, and the \$9.5 million of related General Fund expenditures. The chart that follows details major projects and their funding sources.

Projects Budget				
Projects	<b>Tech Fund</b>	<b>General Fund</b>	Budget	
Data Center Migration	\$8,580,278	\$358,683	\$8,938,961	
E-Government	3,881,380	2,927,541	6,808,921	
E-Mail Project	3,274,766	3,034,023	6,308,788	
Financial System	947,550	0	947,550	
Intranet	2,000,000	1,208	2,001,208	
Network Upgrade	628,474	2,869,373	3,497,846	
Print/Photoshop	128,184	52,788	180,972	
Security	134,032	161,530	295,562	
Mobile Computing	42,749	113,471	156,220	
Electronic Applications	363,972	0	363,972	
Total	\$19,981,383	\$9,518,617	\$29,500,000	

Our findings reveal that DoIT is very reliant on outside consultants. Particularly, outsourcing is necessary for those functions that involve expensive, custom-designed, or complicated information technology. DoIT became dependent on its two main consultants, Lincoln Computer Services and Tier Technologies due to the fact that the County had not previously invested dollars in training its professional staff and because the previous commissioner did not have an information technology background. Some senior DoIT management actively participated in the activities of the department during the period from 2002 through 2004 under the leadership of former Commissioner Craig Love. Many stated that towards the end of his tenure, former Commissioner Love made most decisions based on input from the aforementioned consultants and not his own management team. In some instances, these consultants managed their projects without input from the County. As noted by the Comptroller's audit report dated June 23, 2005:

A computer consulting firm, Lincoln Computer Services, LLC (Lincoln), not operating pursuant to any written agreement with DoIT, provided the department "pro bono" services, including management of three key IT projects (e-mail migration, replacement of computer network routing equipment and installation of storage networking equipment). Lincoln also provided paid services to DoIT as a subcontractor on the e-mail migration project, and was selected to implement the replacement of computer network routing equipment. Therefore, the department allowed Lincoln to oversee its own work on two key projects.<sup>1</sup>

#### The highlights of our report are as follows:

• Although DoIT spent millions of dollars building and equipping the Center, it has failed to arrange for an off-site backup in spite of the fact that the Nassau County Comptroller issued a detailed audit report dated September 4, 2002 describing the lack of data backup off-site. In addition, the Center does not have an emergency coordination plan (written and approved) with the County's Office of Emergency Management.

<sup>&</sup>lt;sup>1</sup> Nassau County Comptroller Audit Report, Page ii, dated June 23, 2005

- There are security concerns at the new location as well as water leaks in the room housing the UPS (Uninterruptible Power Supply) room. Additionally, due to the proximity to the County's helipad and the fumes emitted from helicopters, employees have had to evacuate the building resulting in loss of productivity.
- The e-Government initiatives set an aggressive schedule to complete 13 selected applications some of which are still being developed.
- The e-mail project/PC rollout is 31% complete. Vendor on board will complete the project.
- There is concern regarding the relationship between the County and Lincoln.
- Nassau County signed a five-year lease agreement with Lightpath to provide a SONET managed 'ring' at the cost of \$1.372 million (\$28,000/month for months 2-24). The fiber optic linking County's four sites is not a SONET connection, but a WDM (Wave Division Multiplexing) system. This type of network does not require as much hardware as a SONET system, and is therefore less costly.
- DoIT did not have appropriate checks and balances to monitor vendors, which caused the County to lose thousands of dollars in overpayments or payments without proper documentation.

It should be recognized that the majority of the items that we have reviewed were completed or started under the previous commissioner. While it is not essential that the manager of DoIT be expert in information technology, clearly having a professional with a background in this area serve as the commissioner of Nassau's DoIT was a necessary improvement. Moreover, because our review was not totally operational in nature, we cannot state with 100% certainty if the problems that we uncovered were the result of poor management by the former commissioner and his senior staff or if the commissioner was acting solely on the advice from the outside consultants.

My team and I met with Commissioner Checca to review a draft of the attached report. We agreed to some technical changes and did not ask for a formal response. Given that many of our observations are similar to those of the County Comptroller, I think a formal response would have been similar to the one included in the Comptroller's audit. For instance, in response to the Comptroller's audit, the Commissioner stated:

After having reviewed the available information and discussing several of these points with the NCIT team, I am confident that the County received the goods and services that were paid for, and the County has successfully used those goods and services to effect substantial improvements to its IT infrastructure.

I look forward to improving our business practices in conjunction with the administration's continued efforts to improve services to the constituents of the County.<sup>2</sup>

Regarding procedures the Commissioner stated:

<sup>&</sup>lt;sup>2</sup> Nassau County Comptroller Audit Report, Page 22, dated June 23, 2005

DoIT has implemented monitoring tools for on-site consultants and contractors. These include the use of time sheets and/or project based work orders. Since the fourth quarter of 2004, department personnel have coordinated with the Comptroller's office regarding the use of time sheets for vendors currently under contract.

While the majority of DoIT's software projects are fixed price, milestones and benchmarks are also being used to monitor the progress of development. These procedures are being formalized through written policies.<sup>3</sup>

I would like to thank Commissioner Checca and his staff for their cooperation and professionalism throughout this process. In addition, I would like to thank the staff of the County Comptroller for their assistance. The review performed by OLBR overlapped in scope and in time with the Comptroller's audit. We were able to share material and thoughts, while protecting the independence of each office. The County Charter establishes that a review shall be coordinated with the County Comptroller when it includes or requires accounting audits. Because of this provision, throughout the report we cite references from the Comptroller's audit.

If my office can be of any further assistance please let me know.

cc: John Donnelly, Chief Administrative Officer Robert Checca, Commissioner of Information Technology

<sup>&</sup>lt;sup>3</sup> ibid. pp. 28.

## **TECHNOLOGY FUND EXPENDITURES**

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In February 2002, the Government Performance Project released the report cards for the 40 largest American counties.<sup>1</sup> The Project, a joint venture between Governing Magazine and the Maxwell School of Citizenship and Public Affairs at Syracuse University, gave the lowest overall grade, a D minus, to Nassau. In the area of information technology the County received a D+:

**Positives**: Management of most voice and data communication centralized; integrated financial system implemented for year 2000, although not used to full potential; improved budget for technology training; disaster plan moving forward.



**Negatives**: Inadequate budget for technology purchases and staff; lack of support in previous administration for needed investment; several departments, including police, run separate tech shops with staff that duplicates central IT office; projects need more analysis, before and after implementation; some procurement standards formalized, but more needed.

In recognition of the need to modernize the technology used by Nassau County government departments, in November 2002 the County Legislature amended the County Charter to establish the Department of Information Technology (the "department" or "DoIT").<sup>2</sup> As noted in the Charter, DoIT's powers and duties include

- The planning, formulation and coordination of information technology and telecommunications policies for the county;
- The development of infrastructure and integrated systems for the use and maintenance of software applications;
- The development, purchase and maintenance of hardware and software to meet the needs of departments of the county;
- The planning and provision of telecommunications coordination in support of disaster recovery.<sup>3</sup>

Along with the creation of the department, the Legislature appropriated approximately \$20.0 million to the Technology Fund and \$9.5 million in the General Fund for a total of \$29.5 million for various technology projects as displayed in the charts on the next page.

<sup>2</sup>Local Law 21-2002, amended by Local Law 12-2003.

<sup>3</sup> Nassau County Charter Section 2151.

<sup>&</sup>lt;sup>1</sup>Barrett. K., R. Greene and M. Mariani (2002). Grading the Counties 2002: A Management Report Card. *Governing Magazine* 

Projects Budget				
Projects	<b>Tech Fund</b>	<b>General Fund</b>	Tot. Budget	
Data Center Relocation	\$8,580,278	\$358,683	\$8,938,961	
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E-Mail / PC Rollout Project	3,274,766	3,034,023	6,308,788	
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Security	134,032	161,530	295,562	
Mobile Computing	42,749	113,471	156,220	
Electronic Applications	363,972	0	363,972	
Total	\$19,981,383	\$9,518,617	\$29,500,000	

Projects	Tech Fund Budget	Expensed To Date	Tech Fund Balance
Data Center Relocation	\$8,580,278	\$8,330,278	\$250,000
E-Government	3,881,380	3,274,380	607,000
E-Mail / PC Rollout Project	3,274,766	3,021,841	252,924
Financial System	947,550	947,550	0
Intranet	2,000,000	397,800	1,602,200
Network Upgrade	628,474	191,440	437,034
Print/Photoshop	128,184	128,184	0
Security	134,032	134,032	0
Mobile Computing	42,749	42,749	0
Electronic Applications	363,972	363,972	0
Total	\$19,981,383	\$16,832,225	\$3,149,158

#### **Data Center Relocation**

Nassau County has built a Data Center facility. It will allow for enhanced performance, reliability and provide the County with the scalability needed to adjust to ever changing constituent needs.

As part of the Data Center relocation DoIT has implemented an EMC SAN (Storage Area Network). Data were replicated and synchronized between the old and new Data Centers to accomplish the move. The SAN migration is now complete. One of the SANs is now available to be deployed as part of the Disaster Recovery Plan.

IT Project Update, January 2005

In 1997, International Business Machines, Inc. (IBM) conducted a Business Impact Analysis (BIA) measuring the effect a disaster would have on Nassau County's finances and the County's ability to function. The BIA report prioritized the government's services and operations, identifying the areas that would first need to be restored in the event of a disaster. The report indicated the significant impact that a loss of IT data and operations would have on Nassau County's government. In identifying these areas,

IBM recommended that Nassau County create a "hot site" location to serve as a backup for IT operations in the event of a disaster. In July 2002, Nassau County hired Denver Solutions Group to prepare a Continuity and Disaster Plan Assessment report. The Report substantiated IBM's recommendation for the creation of a "hot site" and also suggested that the County consolidate all IT data to one site. The County, influenced by these two reports, embarked upon the Data Center Relocation initiative to fulfill the recommendations. The initiative consisted of moving the old Data Center to a building located in Bethpage, NY.

The old Data Center was located in the basement of the Nassau County Courthouse at 1550 Franklin Avenue, Mineola, NY. The Administration determined that it had improper ventilation for this type of operation. Poor ventilation can result in overheating of the hardware and inhalation of toxic fumes by personnel. Additionally, the old Data Center was inadequate in size, disorganized, antiquated and situated in a poor location. The physical relocation was initiated in August, 2004 and completed in November, 2004. It consisted of replicating and synchronizing the data without interruption of day to day operations, the physical transfer of significant computer hardware from the old location to the new location and the installation of new network hardware.

The Center has no off-site backup facilities. Even though DoIT spent millions of dollars building and equipping the Center, it has failed to make arrangements for an off-site backup. As mentioned above, even more serious is the absence of a "hot site" that would enable the transfer of the IT functions that support the County's operations. This was also highlighted by the Nassau County Comptroller in an audit dated June 23, 2005, which found the department:

[D]oes not have a "hot site" where equipment and software would be in a constant state of readiness to recover from a disaster. A written agreement with IBM, although informally extended, expired in 2002. The department is discussing the potential sharing of a site for disaster recovery services with local counties and private sector firms. At this time, however, the county is at risk because the department does not have any kind of offsite disaster recovery location and no opportunity to test its disaster recovery protocols.<sup>4</sup>

The Data Center relocation had an original budget of \$9 million, of which \$0.4 million was spent in FY 03 from the County's General Fund. The major obligation consisted of a \$0.3 million purchase of Ethernet service for the County. The \$8.3 million of the remaining \$8.6 million was spent from the Tech Fund in FY 04. The following chart breaks out the Tech Fund and General Fund expenses by vendor:

<sup>&</sup>lt;sup>4</sup> Nassau County Comptroller Audit Report, pp. iii, dated June 23, 2005

Data Center Relocation			
Vendor Name	Tech Fund	General Fund	
EMC Corporation	\$ 4,610,608	\$-	
Vicom Inc.	1,626,728	-	
Contemporary Computer	517,100	16,150	
American Communications	463,000	-	
Dynax Solutions Inc	410,970	-	
All Service Electric Inc.	275,000	-	
Dell	140,530	-	
Systems Mfg Corp.	73,033	-	
Iron Mountain-Off-Site Data Protection	49,397	-	
Communication Supply	36,402	-	
Pkware, Inc.	25,220	-	
Sun Microsystems	17,200	-	
Mc2 Security Inc.	14,000	-	
Steelcase Inc	13,112	-	
Innovation Data Processing Inc	10,752	-	
Anixter, Inc.	8,886	-	
Lnr Tool & Supply Corp.	8,059	-	
Hewlett Packard Company	7,105	-	
Data Path Inc	4,638	-	
Custom Computer Specialists, Inc.	3,367	-	
International Business Machines Corp	3,000	-	
Mayline Group	2,786	-	
Environmental Maintenance Solutions, Inc	2,495	-	
Mid-Island Electrical Supply	1,836	-	
Steelcase Inc	1,542	-	
Waldner's Business Environments Inc	1,500	-	
Washington Computer Services	1,220	-	
Ray-Block Stationery Co	794	-	
Cablevision Lightpath Inc.	-	336,000	
CDW Government Inc.	-	6,533	
Grand Total	\$ 8,330,278	\$ 358,683	

The major obligations in FY 04 consisted of \$4.6 million for various electronic storage devices and accessories from EMC, Inc. (EMC) a \$1.6 million purchase of electronic storage devices from Vicom Inc. (Vicom), and a \$0.5 million purchase of computer services from Contemporary Computers Services, Inc. (CCS). On December 15, 2003 EMC Inc., in conjunction with Lincoln Computer Services, Inc. (LCS), submitted three proposals – on LCS letterhead - to supply the County with the necessary storage hardware for the new Data Center. LCS acted as project manager and provided project specifications during the acquisition and installation of hardware. The three proposals for



Exhibit 1 EMC SAN Boxes

varying levels of services and products indicated costs of \$2.5 million, \$1.5 million or \$1.4 million. The proposal for \$2.5 million consisted of hardware, software, warranty, pre-paid maintenance and professional services for the Bethpage and Mineola location. The \$1.5 million proposal consisted of the same items except for some hardware at the Bethpage location and does not provide for move and reinstallation services from Mineola to the Bethpage location. The \$1.4 million proposal consisted of the same items as indicated in the \$1.5 million proposal but for the Bethpage location only.

On January 30, 2004, EMC submitted to the Nassau County Purchasing Department an itemized price list of all items for purchases totaling \$4.2 million, which included items in the \$2.5 million proposal plus additional hardware and software. The document contained NYS List & Discount prices and Nassau County negotiated prices. The purchase consisted of the hardware drives that store County data, the storage area network (SAN) "boxes" which house the hardware drives (Exhibit 1), implementation services and prepaid maintenance service for 5 years. The County ultimately ordered and purchased the EMC products for \$4.2 million. The Office of the Comptroller questioned the relationship between EMC and LCS. The Comptroller's report indicated that although the "services were supposed to be provided pro bono; we found an unexplained payment from EMC to Lincoln for \$140,000." <sup>5</sup>

The Comptroller's report went on to state:

We found poor controls in place over the receipt of equipment and payment of the 4.2 million dollar invoice. As a result, DoIT paid for equipment that was not listed on packing slips, and paid prematurely for services that had not been provided. In addition, due to lack of segregation of duties, the same individual who requisitioned the equipment also approved the invoice for payment.<sup>6</sup>

In June 2004, Vicom was hired to supply the County with an IBM Model Z800 Computer, IBM Model 3494 Tape Library System, IBM Model P-Series 570 Server and accessories. These items are components of a tape drive system to back up data from all personal computers utilized by the County. Nassau County ordered the aforementioned products. As per examination of the claims vouchers, the County paid \$1.6 million. Additionally, in September 2004 the County hired CCS to perform comprehensive computer maintenance services for the County during the Data Center move to Bethpage. The County paid \$0.5 million for CCS services.

In May 2005 staff from the Office of Legislative Budget Review conducted an unannounced on-site inspection of the Data Center. During the visit our office detected а number of items that raised some concern. For instance, a water leak from the ceiling was discovered in the UPS (Uninterruptible Power Supply) room (Exhibit 2 and Exhibit 3). The UPS room holds the back-up batteries



that Exhibit 2 Ceiling Leak at Data Center



Exhibit 3 Data Center Water Damage

supply electricity to the Data Center in case of a power outage. The building's roof was not replaced when the Data Center was built, which could result in major damage in the event of severe weather.

<sup>&</sup>lt;sup>5</sup> ibid. pp. 16

<sup>&</sup>lt;sup>6</sup> ibid. pp. 16

Another concern was the proximity of the Data Center to the Nassau County Aviation Center, which contains the County's heliport (Exhibit 4). The Data Center is located approximately 50 yards from the heliport. The County's helicopters are housed at the hangar located right next to Data Center and depart



Exhibit 4 The heliport at the County Aviation Center

helicopter fumes that are released during departures have caused employee evacuations of the Data Center and early employee departures from work. An evacuation log sheet (Exhibit 5) is currently maintained at the site to document such occurrences. Numerous employees have filed claims with their union regarding the working conditions at the Data Center. and arrive from the heliport on a regular basis. Consequently, the departures and arrivals have disrupted operations at the Data Center. The ventilation shaft of the data center is very close to the area where the helicopters warm up prior to take off, causing fumes to be sucked into the data center. The

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Exhibit 5 The Fume Log

During the same visit we observed railroad tracks, approximately 25 yards from the Data Center, which provide transit for the Long Island Railroad (LIRR) passenger trains during the day and freight trains at night. The proximity of the tracks to the Data Center raised some concerns for our office regarding the vibrations created by the trains and the possible risk this might pose to the stability of the storage devices. The County's Department of Public Works (DPW) indicated that a contractor had been hired to conduct a seismic study of the premises. DPW provided a copy of the seismic study to our office. The study indicated that there were no significant problems, but recommended further testing in order to qualify equipment to be installed at the location.

Our office also concluded that the facility lacks sufficient security. The department is aware of these issues, and is currently addressing them. They will be reviewing the integration of a security system with the automation of time and leave functionality as part of the Human Resource Management System project.

In order to get a better understanding of the network operations OLBR requested a copy of the Logical Network Diagram (LND). The LND is a document that identifies all the equipment operating within the Data Center and the interconnectivity of the components. An LND is customary in operating a data center. However, DoIT has not provided a copy of their LND, citing security concerns.

It should be noted that in response to the Comptroller, Commissioner Checca stated, "A network infrastructure plan is being finalized by DoIT, which will provide documentation and guidance to the overall County network, including the deployment of all network devices."<sup>7</sup>

OLBR strongly recommends that immediate steps should be taken to repair the water leakage from the roof. The ventilation system needs to be reconfigured, so that the exhaust from the helicopters does not affect employees. We also recommend that DoIT immediately move the backup server to another location and make it a high priority to identify a "hot-site".

DoIT does have some plans.

- DoIT has targeted December 2005 for implementation of its disaster recovery site and plan. As indicated, substantial planning has been completed to date.
- Only as an interim solution, the DR plan of 2002 is being refreshed to include an update. DoIT has initiated discussions with IBM for use of Sterling Forest for restoration services of key County applications. More comprehensive plans are being developed for both disaster recovery and business continuity that are beyond the scope of a "hot site" and insure proper protection to County assets.
- During 2005 DoIT has initiated discussions with both public and private sector entities regarding disaster recovery sites. Included are Suffolk County, Sungard, Keyspan, and telecommunications housing providers.
- DoIT initiated discussions with OEM during 4Q04 regarding disaster recovery and business continuity. In addition, other critical County departments, including the public safety agencies and the Comptroller's office, are being identified for continuity and restoration services.<sup>8</sup>

#### **E-Government Initiative**

Nassau County has chosen to upgrade and improve their presence on the internet. The original project timeline set an aggressive schedule to complete thirteen selected applications which includes a services-based web portal. This will address the constituent's "wants and needs" by making various county agencies available to those with ever increasing internet access.

The benefits of bringing internet access and the infrastructure up-to-date in enhance customer service, reduce cost, increase revenue and improve productivity.

IT Project Update, January 2005

The original project timeline for the e-Government initiative set an aggressive schedule to complete 13 selected applications including a services-based web gateway. The goal was to address the constituents' "wants and needs" by making various County services available online to a growing population of Internet users.

The Administration developed an e-Government strategy that, according to a briefing paper distributed by the IT Department, "incorporated the requirements of the user community which were identified through several means including interviews and surveys. The survey represented a cross section of the

<sup>&</sup>lt;sup>7</sup> ibid. p 31

<sup>&</sup>lt;sup>8</sup> ibid. p 35

citizens and businesses of the County and identified their priorities for e-Government services."<sup>9</sup> In early 2003, an e-Government Task Force made up of Nassau County senior executives recommended 13 high priority applications for the development and roll out of the e-Government initiative.<sup>10</sup>

The online applications will enable citizens to pay for parking tickets, purchase public safety permits, lookup or file complaints for contractors. determine home Medicaid eligibility, purchase leisure passes, reserve golf times, apply for DPW permits, register for County receive bid notifications, Bids, search/download County bids, appeal property taxes, sign up for exams, submit complaints and report waste. (Exhibit 6)

Department The of Information Technology has allocated \$6.8 million for the e-Government initiative. Of this amount \$3 million Exhibit 6 Screen Shot County Website has been spent from the General

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Pay Parking Tickets Check Payment Status Latest Processing Date Faga TPVA Home TPVA Home TRSTCOVec Treasure of Other New York State	Online Parking Ticket's Payment Service.         Welcome to the Nassau County Online Parking Ticket Payment Service. Online payments are accepted by Visu/MasterCard only.         An email address is needed while making an online payment. All payment transactions are performed through secure connections.         Use this page to search for the parking violation tickets only. Recently issued tickets might have not been entered into the database yet. Click <u>latest Processing Use</u> to see the latest data in which all of the takets have been added into the system.         Use <u>Check Payment Status</u> link to check the status of a payment transaction.         Search Payment Status         Please enter the parking violation number as it appears on your ticket and your vehicle plate number.         Ticket Number :         Plate Number :         Example Tickets	
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Fund and \$3.8 million will be expended from the Tech Fund. To date, approximately \$3.2 million has been spent from the Tech Fund. The IT department expects to spend an additional \$0.6 million on the remaining e-Government projects, including the intranet component.

The chart below reflects major expenditures by vendor, from both the General and Tech Fund, related to the e-Government initiative:

E-Government					
Vendor Name	Tech Fund	General Fund	Total		
Tier Technologies, Inc.	\$956,000	\$2,683,000	\$3,639,000		
International Business Machines Corp.	905,278	75	905,353		
Deloitte Consulting, LLP	643,000	-	643,000		
Salmon, LLC	329,120	-	329,120		
Vermont Systems, Inc.	297,300	-	297,300		
Viacom Computer Service, Inc.	-	153,705	153,705		
Neulion Incorporated	72,950	-	72,950		
CDW Government, Inc.	31,312	-	31,312		
American Communications	15,000	-	15,000		
Dell	10,412	-	10,412		
Grand Total:	\$3,260,373	\$2,836,780	\$6,097,153		

The \$3.6 million for Tier Technologies in the above chart includes one contract and four amendments to the contract for Tier to develop the County's e-Government program. Under the contract, Tier

<sup>&</sup>lt;sup>9</sup> e-Government briefing paper from the Department of Information Technology

<sup>&</sup>lt;sup>10</sup> Tier Technologies, Inc., e-Government Strategy.

Office of Legislative Budget Review

Technologies will manage the portal implementation and project management, portal architecture and portal interface. The original contract was awarded on January 27, 2003 for a 12 week term for a cost of \$433,000.

Since its original approval, the contract has been amended four times. The first amendment on November 18, 2003, increased the amount by \$2.25 million to \$2.7 million and extended the term by 22 months. The second and third amendments increased the total by \$500,000 and \$6,000 respectively. The \$500,000 includes funding for labor supported by the Tier team from Tier Technologies. The fourth contract includes an additional \$450,000 which will bring the maximum amount paid to Tier to \$3.6 million. The \$450,000 was approved July 25, 2005 to extend the contract for an additional five months.

The original contract of \$433,000 and the first amendment for an increase of \$2.25 million were paid from the Department of Information Technology's General Fund in 2003. The amendments for \$6,000, and \$500,000 were paid from the Tech Fund in 2004. The amendment for \$450,000 will also be paid from the Tech Fund. The amendments have allowed Tier to continue to manage the implementation of the Nassau County portal.

The second biggest expenditure related to the e-Government initiative is made up of two purchase orders to International Business Machines (IBM) Corp for a total amount of \$905,278. Both purchase orders are for labor hours to facilitate the implementation the County web portal infrastructure. The purchase orders are an extension of the original IBM contract issued in 2003 for \$1.1 million to develop the websphere portal. The original contract was encumbered from IT's General Fund on December 31, 2003. However, this purchase order has not been included in the e-Government budget. Tier Technologies had been contracted to design, develop and bid proposals for the overall initiative, and IBM configured and installed the hardware.

After the liquidation of the original contract for the purchase of hardware and applications software to implement the portal, the department realized additional services were required to complete the project. The \$905,278 includes the additional hours required. The purchase order for \$566,126 from the Tech Fund was posted on May 17, 2004 for the installation of computers, peripherals, and other related equipment. The purchase order for \$339,152 from the Tech Fund was posted December 3, 2004 for the same services which include the installation of computers, peripherals, and other related equipment.

In 2005, the County contracted with Deloitte Consulting LLP for \$643,000 to develop, customize and install an online screening tool of Deloitte's Common Point of Access to Services (COMPASS). This will allow County residents to determine potential eligibility for Human and Health Services and will include the capability to interface with existing application services to schedule an appointment with the Nassau County Health and Human Service office. The term of the agreement is from April 20, 2005 to April 3, 2006.

The County contracted with Salmon in November of 2004 for \$329,120 to implement an online property assessment and appeal system. The system will provide Nassau County's Assessment Review Commission (ARC) with an automated mechanism for appeal submission, processing and inquiry. OPAS (Online Property Assessment Review System) will create a web-based interface for Nassau consumers and ARC users to submit and track property tax grievance filings.

The term of the project was from December 6, 2004 to April 30, 2005. Additionally, a provision was made for one year of postproduction support on an as needed basis. The department expressed an interest to continue the relationship with the vendor for the provision of maintenance services after the

contract expired. Salmon has completed the development and implementation of the system. The next step is testing and debugging to ensure that it will be available and ready for the January 2006 assessment processing. The Assessment Review Commission believes there is enough testing time for the system to be ready by January.

In August of 2004, the County contracted with Vermont Services, Inc. (VSI) to provide the Parks Department with parks and recreation software to manage its operations more efficiently and effectively. VSI develops and supports application software for parks and recreation operations using the 4GL Progress Windows Development Language and the embedded Enterprise Progress relational database.

VSI will acquire software licenses and provide installation and training support for the Department of Parks to automate several key activities including the issuance and tracking of leisure passes, golf reservations, and payment handling. The system will allow for the replacement of manual cash registers with automated Point of Sale devices, which will tighten controls over cash transactions. The contract states that VSI will install its RecTrac, Golftrac, TeleTrac, WebTrac and other software, along with specified Point of Sale (POS) and other hardware, as well as provide management and end user training. POS terminals will be installed throughout the 22 County parks where business sales or processing takes place.

The term of the project is estimated for 9 months from July 1, 2004 through June 30, 2005. The project has been broken into phases. Phase I includes the parks in the Top Ten plan which are Eisenhower, Cantiague, Wantagh, Nickerson Beach, Christopher Morely, Grant, Cedar Creek, Bay Park, and North Woodmere. Phase II consists of Old Bethpage Restoration Village, Mitchell Athletic Complex, Mitchell Rifle Range, Sands Point Park & Preserve, Cow Meadow Park, Garvies Point Museum, African American Museum, Rev. Mackie Park, Inwood Park and Tackapausha Natural History Museum. According to a June 17, 2005 status report, targeted milestones completed for Phase I parks include:

- Physical survey of each park (22 parks) and POS locations (sometimes more than one location)
- Detailed floor plans drawn
- Challenges for each park connectivity documented (including ac power and shelves, security concerns, connectivity issues)
- Contracting Verizon for T1 connectivity
- Successful T1 installation
- Managing ACI to run Cat5 cabling to POS locations
- Managing the testing of complete circuit from remote location to Bethpage Data Center
- Ordering & receiving equipment (ongoing)
- Managing vendor (VSI) onsite visits (scheduling, goals while onsite, training, system setup)
- Managing the POS workstation setup (software, hardware, hardware installation at remote sites)
- System testing (hardware, connectivity, and software)
- Remote POS location signoff
- Managing and implementing the Golf Reservations System (hardware,
- communications, maintenance, and client signoff)
- Managing Golf Web pages and system (and client signoff)

Regarding the Rectrac and Golftrac, 22 POS terminals have been connected and are processing transactions. Terminals have been placed at Eisenhower Aquatic Center (one leisure pass, two cash

transactions, and two Admin), Eisenhower Golf (one leisure pass unit and two Admin), Eisenhower driving range, Nickerson Beach Counter (leisure pass and Admin), N. Woodmere Admin, Golf, and Driving Range. A single terminal has also been placed at Grant Park, Wantagh Admin, Christopher Morley Admin, Cedar Creek, and Bay Park Golf. Four standalones include Cantiague Admin, Golf, Driving Range and Christopher Morley Golf.

Outstanding items include the NIFS interface with RecTrac, and e-Payments credit card acceptance over the web. Phase II Parks Automation POS (10 units) is in progress and anticipated to be completed by August 2005. Phase III Parks has not been addressed by Parks.

The purchase order for \$15,000 with American Communications is also related to the Parks e-Government initiative. Radio, telecommunications, and facsimile transceivers equipment will be installed at Eisenhower Park for a point of sale tracking system.

In December 2003, the IT department purchased hard drives and peripherals for the IBM mainframe server from Viacom Computer Services, Inc. at a cost of \$153,705.

The County contracted with Neulion in June 2004 for \$72,950 to develop and install an application code that will integrate the new IBM Web sphere portal with the CompuCourt System. Under this integration, the Police Department interfaces with the Traffic and Parking Violations Agency (TPVA) to process parking tickets. The term of the agreement was from July 1, 2004 to June 30, 2005.

The objective of the portal is to provide the County with a new web-based, self service system for online parking payments that can be easily implemented and customized. The system will deliver immediate connectivity to appropriate back office systems and allow departments to share information.

As of February 2005 the website was up and running. Gross payments, including payments to the County and other municipalities have totaled approximately \$320,000. Since execution of the website, TPVA encountered some glitches with the system causing a temporary slowdown in service. This problem has since been corrected.

The remaining purchase orders are for computer and technology equipment. The purchase order with CDW Government, Inc. totals \$31,312 for hard drives and accelerator boards that fit into the servers at the Data Center. The \$1,890 to ASAP Software Express Inc. includes two purchase orders for utility software and program products for mini/mainframe computers including licenses. The \$10,412 to Dell Computers includes two purchase orders for a Dell workstation microcomputer.

DoIT has spent millions of dollars on out sourcing most of the e-government software development and deployment. We are not aware of any plans to hire the appropriate staff to support all of these initiatives. If not, this will lead to the continued use of outside consultants. The current skill sets of staff need to be evaluated and a comprehensive plan for retraining of staff should be developed.

The IT Department is initiating a new channel for the sharing of internal County information called an "Intranet." The objective of this new function will be to deliver hands-on, timely and relevant news, information, forms and announcements to employees through the use of an internal web server and basic content management tools. This project will be integrated into the e-Government project to leverage the Websphere Portal.

IT Project Update, January 2005

The only expenditure so far for this project is a \$397,800 contract with ENI Systems (ENI), to develop and deploy an intranet portal for all County employees to access. The contract was approved July 25, 2005. Under this contract, ENI will develop Intranet/Portal User Interface (UI) that will have a similar look to Nassau County's Internet's home page. ENI will work on the migration and development of five agencies on the new portal enterprise standard; advise on the design of Intranet architecture; install and configure all software necessary to support and enable the Intranet solution; assist in developing a single sign-on security architecture from the County's network to the Intranet and provide additional functional capabilities.

The County Intranet is a timely project and will assist employees and departments with internal communications. This could be a valuable tool for knowledge management.

#### E-mail project / PC Rollout

Nassau County is supporting multiple e-mail platforms which have limited our ability to communicate, have presented costly integration challenges and have sub-optimized our maintenance support costs.

Nassau County will standardize to Microsoft XP operating system, install Microsoft 2003 Office Suite, migrate all employees to Outlook Exchange 2003 for e-mail and PC rollout.

IT Project Update, January 2005

Prior to the implementation of the e-mail/PC rollout project Nassau County was supporting multiple email platforms. These platforms included Novell GroupWise and Microsoft Outlook. The Administration believed the different platforms had limited ability to communicate with each other. Through the e-mail/PC rollout project initiative, the department of Information Technology (DoIT) hoped to standardize all computers to Microsoft XP operating systems, install Microsoft 2003 Office Suite, and migrate all employees to Outlook Exchange 2003 for e-mail. Of the \$20 million technology fund budget, \$3 million, or 15%, was allocated for the e-mail/PC rollout project.

The goal of Phase I of the e-mail/PC rollout project was to install kiosk work stations throughout the County for employees without access to any e-mail system. This phase of the project was completed at a cost of \$450,000. There are approximately 110 kiosks throughout the County.

Phase II of the e-mail/PC rollout project began on January 23, 2003. DoIT entered into a contract with RCG for \$1.5 million to begin the project. To date, including kiosk users, 4,000 new accounts have been added to the County's network. However, as the Comptroller's IT audit points out:

DoIT failed to seek additional funds for e-mail expansion and migration to Microsoft Outlook (the e-mail migration project), after concluding that additional work beyond that contemplated by the original contract scope was necessary to complete the project. Because DoIT did not obtain the additional contract funding, the department had to halt the e-mail migration project after the original \$1.5 million encumbrance was spent and when the county e-mail rollout was estimated at only 31% complete. DoIT now anticipates that another \$1.5 million will have to be spent to complete the project as originally envisioned, including the upgrading or replacement of older PCs.<sup>11</sup>

The report goes on to say:

RCG's weekly status reports for this same time frame indicate that the rollout was "proceeding at a less than optimum rate due to delays by Lincoln/Nassau County in PC upgrades", with only 150 computers converted out of 232 that were planned to have been converted by March 29, 2004. [RCG status report of March 28, 2004] Subsequently, RCG reported that migrations and upgrades were limited due to computers not upgraded. As of May 28, 2004, when Lincoln stopped working for the county, only 648 out of 2,100 users were converted. RCG's weekly status report of May 30, 2004 states that Lincoln did not provide any software or data when it withdrew, necessitating an assessment by RCG of the unfinished work. As a result, when RCG removed its staff because the county had no more funds encumbered to pay RCG, the Exchange 2003 E-mail rollout was only 30% complete, according to the last status reports.<sup>12</sup>

Further comments in the audit report, relating to this project, included the following:

- We found no evidence that DoIT monitored the hours spent by RCG on this project to ensure that the hours spent supported the required tasks.<sup>13</sup>
- Because these funds were not encumbered, the project ran out of funds in June 2004, and RCG had to stop work.<sup>14</sup>
- We found changes were made to the scope of work for the Phase II e-mail project without proper approvals. It is our understanding from DoIT senior management that the former commissioner, working with Lincoln, assumed project management duties for Phase II, including the approval of change orders. The RCG contract, however, required that a change order which directly or indirectly involved a change in cost, or otherwise materially altered a party's rights and obligations, be approved by the DCE.<sup>15</sup>
- The administration should take steps to ensure that encumbrances for time and materials contracts are not exceeded, and the required approvals for change orders and encumbrances are obtained.<sup>16</sup>

By the department's estimate, 500 new PCs were deployed (110 as kiosk) and 733 PCs were either replaced or upgraded (Exhibit 7). Approximately 1,000 users in 17 departments have not yet received new computers or upgraded systems. In the next phase of the e-mail/PC rollout project 1,000 PC's and 2,500 e-mail conversions will be accomplished in the following departments:

- Assessment
- Board of Elections
- Civil Service

- <sup>12</sup> ibid. pp. 8
- <sup>13</sup> ibid. pp. 5

- <sup>15</sup> ibid. pp. 4
- <sup>16</sup> ibid. pp. 6

<sup>&</sup>lt;sup>11</sup> Nassau County Comptroller Audit Report, pp. ii dated June 23, 2005

<sup>&</sup>lt;sup>14</sup> ibid. pp. 5

- Consumer Affairs
- County Clerk
- Correction Center
- District Attorney
- Fire Commission
- Legislature
- Labor Relations
- Minority Affairs
- Medical Examiner
- Parks & Recreation
- Planning
- Public Works
- Sheriff
- TPVA

In the 2003 budget year, before the Legislature approved the Technology Fund approximately \$3 million was spent from the Information Technology's departmental budget on the e-mail/PC rollout initiative.



Exhibit 7 New and used computers sit in the DoIT storage room

Email/PC Rollout Project					
	2003 General Fund Purchases				
Document Number	Vendor name	Transaction Amount			
CLIT03000023	RCG INFORMATION TECHNOLOGY, INC.	\$1,500,000			
CQCW03000201	RCG INFORMATION TECHNOLOGY, INC.	450,000			
POIT03000008	DELL MARKETING LP	11,036			
POIT03000014	WASHINGTON COMPUTER SERVICES	38,090			
POIT03000076	AMERICAN COMMUNICATIONS	100,000			
POIT03000077	DELL MARKETING LP	2,194			
POIT03000078	DELL MARKETING LP	680			
POIT03000084	AMERICAN COMMUNICATIONS	130,000			
POIT03000095	DELL MARKETING LP	1,552			
POIT03000098	WASHINGTON COMPUTER SERVICES	20,520			
POIT03000102	PETE'S TOWING & AUTO BODY	10,000			
POIT03000106	WASHINGTON COMPUTER SERVICES	9,375			
POIT03000111	DELL MARKETING LP	228,000			
POIT03000130	DELL MARKETING LP	3,600			
POIT03000161	DELL MARKETING LP	96,100			
POIT03000178	DELL MARKETING LP	8,404			
POIT03000185	DELL MARKETING LP	8,169			
POIT03000192	DELL MARKETING LP	781			
POIT03000217	DELL MARKETING LP	4,966			
POIT03000228	DELL MARKETING LP	2,196			
POIT03000244	DELL MARKETING LP	2,181			
POIT03000248	DELL MARKETING LP	89,638			
POIT03000281	DELL MARKETING LP	\$316,540			
Total		\$3,034,023			

Almost \$2 million was spent on two contracts with RCG. DoIT spent \$1.5 million on phase II of the email project and \$450,000 on the PC roll out. At the time these funds were expected to be sufficient to fund the entire project.

In response to the points raised in the Comptroller's audit, the DoIT Commissioner stated:

There were weekly status reports provided by the vendor that indicated the number of hours booked for that week and a total of project hours. Phase I of the project was delivered on time and on budget.

The scope of Phase II was changed by the former commissioner as the vendor was tasked to upgrade to a selected system standard of hardware and software. These standards did not exist in the past. There were insufficient funds committed to this phase to complete it, and the work remained a departmental priority.<sup>17</sup>

<sup>&</sup>lt;sup>17</sup> ibid. pps. 24-25

As of July 2004 when activity was suspended, the project had expended \$2.5 million from the Technology Fund. DoIT selected a vendor from the State approved vendor list and issued a contract for approximately \$550,000 during the second quarter of 2005 to complete the final stage of the project. This new appropriation brings the cost of the e-mail pc/rollout project to nearly \$6 million.

DoIT processed 18 separate purchase orders to facilitate the e-mail/pc rollout project. All of the purchases which were made from the Technology fund in FY 2004 related to the e-mail/PC rollout project are listed in the chart below.

	Email/PC Rollout Project	
Purchase Order Number	Technology Fund Purchases Vendor name	Transaction Amount
POIT04000320	DELL	\$873,440
POIT04000092	DELL MARKETING LP	415,602
POIT04000259	DELL	353,600
POIT04000302	DELL	175,620
POIT04000051	DELL MARKETING LP	127,606
POIT04000044	NEW HORIZONS	93,000
POIT04000139	DELL	92,462
POIT04000159	DELL	67,050
POIT04000135	DELL	49,577
POIT04000104	DELL MARKETING LP	47,610
POIT04000035	DELL MARKETING LP	46,347
POIT04000281	DELL	45,439
POIT04000105	DELL MARKETING LP	33,525
POIT04000074	EMC CORPORATION	24,570
POIT04000156	DELL	19,239
POIT04000339	DELL	7,960
POIT04000207	CDW GOVERNMENT INC	1,564
POIT04000106	THE WEEKS LERMAN GROUP	\$554
Total		\$2,474,766

Of the 18 purchase orders, 14 were procurements from Dell Computer Corporation for a total amount of \$2,355,078. The County received desktop and tower based computers, computer monitors, keyboards and various other hardware and software related to individual workstations.

New Horizons, a computer learning center was contracted through a purchase order for \$93,000. For this fee the County received 100 days of instructor-led training at the New Horizons facility at a cost of \$925 per day. During the 100 days of training approximately 1,200 County employees were trained. Training included Outlook 2003, Microsoft Office 2003 and Windows XP. EMC was also contracted through a purchase order in the amount of \$24,570. This contract was for computer software maintenance and support for a period of one year which ended in August of 2004. The remaining two purchase orders with CDW Government and The Weeks Lerman Group were for modems and mouse pads respectively.

DoIT continues to migrate users to Outlook Exchange and upgrade desktops. This is a positive move and provides the users useful work tools. However, this migration and upgrade to newer desktops will not fix the LAN/WAN problems that continue to plague some of the users. The routers/switches and servers need to be reexamined and upgraded.

#### **Financial Systems**

The Department of Information Technology contracted with Tier Technologies to conduct a needs assessment and create a plan to align the financial system (NIFS) capabilities with the County's current business processes. The scope of this project includes: identifying and mapping major business processes, evaluating the skills of County employees who use the system, and analyzing the environment in which the system operates. Tier delivered an implementation roadmap for an upgrade to the FAMIS system, highlighting new functionality to be provided and training requirements for County users, along with cost, timing and resource estimates for the upgrade.

IT Project Update, January 2005

In December 2004 the County selected Tier Technologies Inc. (Tier) to enhance its current financial accounting system (FAMIS) and train staff on the related enhancements. The scope of the project includes: identifying and mapping major business processes, evaluating the skills of the County employees who use the system, and analyzing the environment in which the system operates. According to the contract executed by the two parties, Tier intends to conduct a business process review analysis, reinstall the Fixed Assets System, automate bid notification and online vendor registration and train staff on various enhancements to FAMIS. The services and enhancements should be completed by January 3, 2006. The County incurred an obligation of \$947,500 as a result of the agreement with Tier. DoIT also utilized Tier to perform separate services under the e-Government initiative discussed above.

#### Network Upgrades

Department of Information Technology is upgrading the County's core network infrastructure from Alcatel to Cisco by installing a redundant Fiber SONET Ring that will connect 1 Wes Street, 240 Old Country Road, 101 Grumman Road, and 60 Charles Lindbergh Boulevard. All of the older Alcatel and Nortel switches will be upgraded to modern Cisco devices.

IT Project Update, January 2005

The Department of Information Technology's original plan stated that the County's core network infrastructure would be upgraded from a wave digital network to a Synchronous Optical Network (SONET) connecting One West Street, 240 Old Country Road, 101 Grumman Road, and 60 Charles Lindbergh. The International Engineering Consortium (IEC) describes this type of network as follows:

Synchronous optical network (SONET) is a standard for optical telecommunications transport formulated by the Exchange Carriers Standards Association (ECSA) for the American National Standards Institute (ANSI), which sets industry standards in the U.S. for telecommunications and other industries. The comprehensive SONET standard is expected to provide the transport infrastructure for worldwide telecommunications for at least the next two or three decades.<sup>18</sup>

According to the IEC, "The increased configuration flexibility and bandwidth availability of SONET provides significant advantages over the older telecommunications system."<sup>19</sup> As part of the project all of the older Alcatel and Nortel switches were changed to modern Cisco devices. Within the Technology fund \$3.0 million was budgeted to achieve this initiative. OLBR has received documentation from Lightpath which states that a redundant fiber SONET ring was not installed. Although the County's five-year lease agreement with Lightpath is for a redundant SONET ring at a current cost of approximately \$28,000 per month, the County does not benefit from the capabilities of a SONET ring.

<sup>&</sup>lt;sup>18</sup> "Synchronous Optical Network (SONET): Definition and Overview", International Engineering Consortium, www.IEC.com

<sup>&</sup>lt;sup>19</sup> ibid.

Upon questioning DoIT and Lightpath, OLBR determined that Lightpath did not provide a SONET connection, but installed an alternate fiber optic transport system utilizing Wave Division Multiplexing (WDM) instead.<sup>20</sup> This type of network does not require as much hardware as a SONET system, and is therefore less costly.

In total, the Department of Information Technology expended \$35,857 in network upgrades from the Technology Fund. These funds were encumbered from the Technology Fund over four purchase orders. The chart below illustrates those four purchase orders which are for maintenance and support of existing hardware and software.

	Network Upgrades Technology Fund Purchases	
Purchase Order Number	Vendor name	Transaction Amount
POIT04000026	ANIXTER, INC.	\$14,271
POIT04000153	DATA PATH INC	12,176
POIT04000227	F. POLES MCCARTHY INC.	6,500
POIT04000144	ANIXTER, INC.	\$2,910
Total		\$35,857

The department's records also show expenditures from the 2004 operating budget for Network upgrades totaling \$174,350. These funds were expended over 12 separate purchase orders with two companies. Lincoln Computer Service was contracted through a purchase order to install a catalyst at a cost of \$114,366. A catalyst is a large switch which directs network traffic. Anixter Incorporated is the vendor on the remaining \$59,984 or 11 purchase orders. These purchase orders are for various lines, converters and components related to the catalyst.

DoIT also spent \$2.9 million from the 2003 operating budget on the network upgrade project. The purchase of the Cisco routers accounts for \$2.4 million of these funds. The remaining \$500,000 was spent over two purchase orders with American Communications. These purchase orders were for maintenance of computer and phone lines throughout the County and the Community College.

	Network Upgrade Project 2003 General Fund Purchases	
Purchase Order	Mark and a second	Transaction
Number	Vendor name	Amount
POIT03000278	LINCOLN COMPUTER SERVICE, LLC	\$2,409,373
POIT03000223	AMERICAN COMMUNICATIONS	65,000
POIT03000222	AMERICAN COMMUNICATIONS	\$395,000
Total		\$2,869,373

#### Lincoln Computer Service

In the summer of 2002 Nassau County began a relationship with Lincoln Computer Services, LLC (LCS) in which LCS performed pro-bono work providing IT support for the County. In the initial stages of the relationship LCS assigned a certified technician to assist the IT Help Desk with backlog issues.

<sup>&</sup>lt;sup>20</sup> Memo from Lightpath, Steve Haniotis, undated, hand delivered by Robert Checca



After gaining approval and support from Craig Love - at the time the County's Commissioner of the Department of Information Technology (DoIT) LCS's role \_ and responsibilities started to increase. Subsequently, LCS conducted weekly meetings with the former Commissioner of DoIT and other department managers in order to offer guidance and assistance on various technical issues. After the examination of numerous County documents our office started questioning the relationship between the County's DoIT and LCS.

In June 2003, the County entered into discussions with Cisco

**Exhibit 8 Cisco Routers in Supply Room** Systems, Inc. (Cisco) regarding the purchase of networking equipment for the County. In the following months the County received several price quotations from Cisco indicating a 32% discount from New York State (NYS) Contract Prices on Cisco routers. Routers are normally used to control and direct network traffic within a network system.

In December 2003, LCS entered into the discussion with both parties as a new Value Added Reseller (VAR) for Cisco. As a VAR, LCS was authorized to sell Cisco products under the terms and conditions of the contract between Cisco and NYS. On December 24, 2003 the County received a price quotation from Cisco indicating a 48% discount off of NYS Contract Prices with a total cost of \$1.63 million. On December 29 and December 30 of the same year the County received another price quotation from Cisco reverting to the 32% discount of the NYS Contract Prices with a total cost of \$2.41 million. In comparing the County's purchase order, dated December 31, 2003, with the price quotations received from Cisco the County ultimately received a 32% discount at a final cost of \$2.5 million.

Based on the review of the price quotes from Cisco and County purchase orders, the County did not receive the savings that were alleged by DoIT and LCS. An inter-office e-mail written by Craig Love states that "the ultimate pricing offered through Cisco with Lincoln was the lowest ever offered to a Municipal government (48% off NYS Contract List Price - prior to bundled services and support). Not only did this price beat any competitive offers, it also included levels of service and support that are significantly above and beyond the norm."

The recent audit report from the Nassau County Comptroller, dated June 23, 2005, states that:

DoIT circumvented State OGS and local procurement procedures. The cost of 3,200 hours of consulting work related to the Cisco equipment purchase was included in the \$2.4 million Cisco equipment purchase order, but consulting deliverables were not included in that purchase order (the original 48% discount offered on Cisco equipment was reduced to the standard State OGS contract discount of 32%, apparently to account for the provision of consulting services). Instead, Lincoln described the services to be provided to implement the Cisco network ("discovery/planning" and "installation/configuration") as "at no additional costs" in a separate, unsigned, undated document.

We found that approximately \$514,000 of the Lincoln purchase order for Cisco equipment was for the provision of 3,200 hours of consulting services. The department, therefore, paid an average of \$161 per hour for these services, higher than Lincoln's average billing rate of \$91. Lincoln may have needed to employ higher than average cost

employees for the services provided. However, because the Lincoln purchase order did not contain provisions specifying the consulting services to be provided and the department did not maintain complete time records for Lincoln or otherwise validate the time spent by Lincoln, we found that DoIT cannot quantify the value of the consulting services it received. Moreover, because the purchase order was for equipment, the consulting services were paid for upon receipt of the equipment but before the services were provided. In addition, because a description of the consulting services was not set forth in the purchase order, DoIT may have used the order to finance the provision of some services unrelated to the purchase and installation of Cisco equipment.<sup>21</sup>

The County's DoIT indicated that the routers were critical to the Data Center relocation. The routers would facilitate the build out of the new fiber optic ring that would be furnished by Lightpath, a business division of Cablevision Systems Inc. A fiber optic ring is used to provide high speed passage for Internet data and service. According to DoIT the purchase would provide the County with an enhanced, more reliable, redundant and dependable network.

Questions were also raised as to the need for the routers and the selection of Cisco as the vendor. At the time of the purchase the County was utilizing Alcatel routers. Some senior staff members of DoIT, from both the previous and current administration, expressed their concern at the recommendations made by Lincoln to move to Cisco equipment. These DoIT staff members have stated that their recommendation was for the County to upgrade the Alcatel equipment instead of switching to the Cisco routers. Although not a disinterested observer of the process, an Alcatel manager lent support to this viewpoint. According to Eric Grubel, Vice President, Alcatel North America, even Verizon, a Valued Added Retailer (VAR) for both Cisco and Alcatel, had suggested that the County upgrade the Alcatel equipment. This was stated in an e-mail dated December 24, 2003, sent to former Commissioner Love, as a follow-up to a meeting that was held by senior IT management and Alcatel staff. One item of discussion during this meeting was that Lincoln had no experience with Alcatel equipment, and that was the reason they were recommending Cisco routers.<sup>22</sup>

Commissioner Checca's response to the Comptroller was:

During this period, the network infrastructure of the County was crumbling. Network and service availability averaged well below any acceptable industry standard. The Alcatel gear was aged beyond upgrading. Over the last several years, Cisco has become an industry leader in the research and development of telecommunications equipment. The Department is satisfied the choice of Cisco networking equipment was in the County's interest. The County has continued to expand its network with Cisco equipment. The recent purchase of Cisco equipment for the Parks connectivity project was competitively bid and awarded to Verizon – which is a Cisco "gold" partner.

Today the County has written policies and guidelines, which did not exist during the period covered by the audit. Even with lack of established policies in place, the procurement of this Cisco equipment, with the associated services for planning and installation provided by Lincoln, has resulted in a state-of-the-art high speed fiber network.<sup>23</sup>

<sup>&</sup>lt;sup>21</sup> Nassau County Comptroller Audit Report, pp iii, dated June 23, 2005

<sup>&</sup>lt;sup>22</sup> Email to Nassau County IT, from Eric Grubel, VP, Alcatel, dated December 24, 2003

<sup>&</sup>lt;sup>23</sup> ibid. p 29.

In addition, Lincoln's role in this process has the appearance of a conflict of interest as indicated in the Comptroller's audit:

Because Lincoln was providing advice to DoIT on which equipment to use at the same time that Lincoln was bidding on supplying the same equipment to the department, DoIT should have insured that there was not even the appearance of a conflict of interest. At a minimum, it should have independently documented its decision to use Cisco equipment, and documented why it was appropriate to consider Lincoln for selection as a Cisco reseller when Lincoln had recommended the use of Cisco equipment.<sup>24</sup>

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Based on our interviews with DoIT management and senior staff, we conclude that the former commissioner relied on the expertise of the vendor (Lincoln) in managing this initiative. Lincoln managed its own work with no departmental oversight, and provided neither adequate time records nor a written plan for the configuration and installation of the equipment.<sup>25</sup>

Furthermore, after some investigation it was discovered that many of the Cisco routers are not being utilized. During a visit to DoIT's headquarters, we observed Cisco routers – with an approximate worth of \$0.9 million - still in their original packaging (Exhibit 8 and Exhibit 9). This raises the following questions: Why are the routers not deployed, when are they going to be deployed, and were they ever needed? According to DoIT, they plan to deploy the routers in the future to support network traffic for various County buildings.



Exhibit 9 Cisco Routers in Supply Room

The Comptroller's audit report indicated that, "The county is using CCSI to complete a design configuration and implementation plan for the remainder of the Cisco equipment. After this phase of work is completed, Lincoln will be recalled to complete its installation obligation." <sup>26</sup>

In a separate transaction, LCS entered into a contractual agreement with RCG Information Technology, Inc. (RCG) which called for LCS to perform programming, engineering, technical and other specialized services for Nassau County. More specifically, LCS was supposed to develop and test disk images which would allow the user to copy data and configuration from one computer onto another computer. Similar configuration between computers would allow IT technicians to perform easier computer maintenance. As consideration for the services RCG would pay LCS \$100,000 and in turn Nassau County would pay RCG \$100,000.

The Comptroller's audit indicates that:

Lincoln began work before its contract with RCG was signed. As of December 31, 2003, Lincoln's timesheets showed 305 hours worked on the e-mail/PC rollout project, not the 800 hours required for the \$100,000 payment. According to the weekly progress reports submitted by RCG, the ghosting and testing of disk images work was still ongoing in mid-January 2004. On December 23, 2003, six days prior to the execution of the

<sup>&</sup>lt;sup>24</sup> Nassau County Comptroller Audit Report, pp ii, dated June 23, 2005

<sup>&</sup>lt;sup>25</sup> ibid. pp. 15

<sup>&</sup>lt;sup>26</sup> ibid. pp. 15

subcontract between RCG and Lincoln, DoIT approved a \$100,000 payment to RCG for Lincoln's services, thereby approving and processing an invoice for payment not supported by adequate documentation attesting to work performed.<sup>27</sup>

Commissioner Checca responded:

It is DoIT's policy to make payments according to contract terms or deliverables. While there appears to have been inadequate documentation of monitoring of the contractor in the past, DoIT is confident that both vendors provided the contracted services.<sup>28</sup>

The transaction raised some questions from the Comptroller's office as to DoIT's monitoring and payment authorization of the services that were performed by LCS. According to the Office of the Comptroller, DoIT approved and processed an invoice from RCG without documentation certifying completion of work. The Comptroller's Office indicates in their June, 2005 Limited Review Report of DoIT that "No payments to DoIT contractors or subcontractors should be made in advance of completion of the work assignment."<sup>29</sup>

In both transactions DoIT exercised poor management practices and judgment in allowing LCS to participate in the consulting and management of areas in which LCS also received payment for services they provided. DoIT should have applied stronger controls and monitoring methods in order to better manage LCS. The Comptroller's Office supported these sentiments by stating in their report that "Lincoln managed its own work with no departmental oversight, and provided neither adequate time records nor a written plan for the configuration and installation of the equipment." The report went on to recommend:

If the county works with a pro bono provider of services, there should be clearly defined parameters as to the services to be performed and the project milestones to be completed. In addition, the county should not provide special treatment to a pro bono provider in a subsequent procurement process and the provider of pro bono services must be made aware that the provision of those services will not result in any special treatment. Where legal issues arise concerning the use of pro bono service providers, the county attorney's advice should be sought.<sup>30</sup>

<sup>&</sup>lt;sup>27</sup> ibid. pp. 7

<sup>&</sup>lt;sup>28</sup> ibid. p 27

<sup>&</sup>lt;sup>29</sup> ibid. pp. 7

<sup>&</sup>lt;sup>30</sup> ibid. pp. 13

The County currently had decentralized printing functions within three separate locations. Each facility has antiquated equipment that frequently needs service and maintenance. The upgrade of these services was deemed a County Executive initiative so that all County printing services could be consolidated and managed out of one area. The County's Photo shop also utilized aged equipment and methodologies which include chemical emulsion for developing and printing.

The use of state-of-the-art high speed scanning, printing and graphics is faster and more cost effective. Storage of photos and graphics will now be done electronically saving physical space as well.

IT Project Update, January 2005

To date, the department has spent approximately \$181,000 on the print shop, of which \$128,000 has been from the Tech Fund and \$53,000 from the General Fund. The following chart breaks out the expenses by vendor:

Print Shop				
		General		
Vendor Name	Tech Fund	Fund	Total	
Xerox Corp.	48,718		48,718	
Calumet Photographic, Inc.	47,500		47,500	
ASAP Software	10,259		10,259	
Software House International, Inc	8,451		8,451	
Lincoln Computer Service, LLC	5,673		5,673	
Anixter, Inc.	5,269		5,269	
Ready Data, Inc	2,314		2,314	
Compucom Systems, Inc.		24,913	24,913	
Dell Marketing LP		24,477	24,477	
CDW Government, Inc.		3,398	3,398	
Grand Total:	128,184	52,788	180,972	

The largest expenditures were a \$48,718 purchase order to Xerox Corporation and a \$47,500 purchase order to Calumet Photographic Inc. The purchase from Xerox includes a scanner and scanning equipment. The \$47,500 is for a Canon digital camera and accessories. The payment to ASAP Software Express Inc. is for desktop publishing software for microcomputers. The \$8,451 expense to Software House International, Inc includes two purchase orders for desktop publishing software for min/mainframe computers.

The amount expended to Lincoln Computer Service, LLC is for electronic storage devices, utilities software and support services. The \$5,269 expended to Anixter is for power supplies, surge protectors and switches.

These purchases have allowed for greater productivity and timeliness.

#### **Security**

- We are in the process of upgrading our perimeter (firewall) protection to ensure the security of the new e-Government infrastructure.
- We are in the QA phase of a deployment of Cisco Security Agent, which is designed to stop worms before they can spread through the network.
- We are planning the installation of CipherTrust's IronMail e-mail security appliance. This appliance will allow centralized control over e-mail security policy, defending all our e-mail platforms from spam and e-mail-borne viruses.
- We are planning the reconfiguration of our anti-virus infrastructure to better protect our desktop systems.
- We are designing an extranet FTP service to allow secure automated file transfers between the County and its vendors, insurance providers, banks, etc.

IT Project Update, January 2005

In March 2004, the County retained the services of Dyntek Services, Inc. for \$124,018 to develop an email security platform. The platform would serve as a barrier between the Internet and the County's internal e-mail servers, providing anti-virus, spam blocking and encryption features. The purchase included two internet perpetual scanners with anti-virus option and three-year maintenance service.

OLBR strongly agrees that both physical and electronic security is very important for the County's Network. The software/firewall and Cisco router that are being deployed should provide excellent security. In addition, the County should continuously upgrade and test the network for breaches.

#### **Electronic Applications:**

Project Listing: ProLaw, Comptroller Bar-coding, labeling, inventory tracing system, Assessment, Laser Check Printing, Debt Management, Drug Dispensing, TPVA Printing, Wang Conversion –Purchasing/Fleet Management, Speech Recognition, Quincy – Medical Examiner/Health, Hotdocs.

IT Project Update, January 2005

Expenditures for electronic applications include contracts to support the Wang Migration as well as software to support legal document assembly. The following chart displays the contracts relating to the electronic applications:

Electronic Applications			
Vendor Name	Tech Fund		
Getronics Wang Co., llc	\$250,000		
Park Systems	75,000		
Basha Systems IIc	22,000		

The contracts with Park Systems and Getronics Wang were issued to support the Wang Migration. The contract with Park Systems is to migrate Nassau County's Probation Department Family Division's computer operations off of the Wang VS minicomputer and onto a client/server platform. The contract with Getronics is being utilized to support the Wang Mainframe for various County departments including the Assessment Review Commission. The Wang system is utilized by the Department of Social Services and Probation at 101 County Seat Drive, and the Treasurer's Office, the Assessment Review Commission, Assessment and the County Attorney's Office at 240 Old County Road.

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Last September, the County contracted with GetronicsWang Company for \$250,000 to support and upgrade the County's Wang system. The vendor will provide the County with general programming, consulting and support services to perform VS Cobol applications, design, development, programming, testing and documentation for the Assessment Review Commission (ARC) and the Assessment Department. A programmer from Getronics is working with three IT employees to upgrade ARC, Assessment, the County Attorney's office and the Treasurer's office to a SQL Microsoft database production. The IT department expects the project to be completed by the end of the year and forecasts the total expense to be lower than the maximum amount of \$250,000.

The County contracted with Park Systems to migrate Nassau County's Probations Department Family Division's computer operations off of the Wang VS minicomputer for \$75,000. The contract is to maintain, modify and convert the Wang-based systems. Park Systems wrote the original Nassau County Probation Department's Family Division (NCFD) application on the Wang VS minicomputer in 1988. The term of the project is from September 28, 2004 to June 30, 2005. The plan is to re-write and replace the current Wang system with Windows SQL server written in visual basic. The old Wang document libraries are being converted to Microsoft Word.

The County contracted with Basha Systems last July for software installation and training. The software is called HotDocs and is utilized to assemble legal documents. The software has been tailored for the District Attorney's Office and is currently being utilized by the department. The software replaces an obsolete IBM system which costs \$22,000 annually. The Basha contract cost is a one time fixed fee of \$26,000. Therefore after one year, savings will be generated due to the non-recurring cost of the new software. The agreement is from June 21, 2004 to June 21, 2005. In the future, the County Attorney's Office may purchase the software for document assembly.

#### **Mobile Computing**

The Department of Information Technology has deployed Blackberry handheld devices to Nassau County senior executives that required remote access to e-mail and frequently were traveling and out of the office. To date, 96 Blackberries have been deployed.

IT has also purchased and distributed Laptop computers on an "as needed" basis. These have been distributed to senior staff and personnel who have a demonstrated business need.

This new initiative has enhanced business communications among County Departments and Senior Staff on a 24x7 basis

IT Project Update, January 2005

Of the \$250,000 appropriated to Mobile Computing, \$136,530 was paid from the 2003 General Fund. These expenses were paid to Dell Marketing, L.P. for laptop notebooks. The Blackberry handheld devices were charged exclusively to the General Fund.

This is an excellent tool for the County. We would encourage the use of mobile computing, including laptops and Personal Digital Assistants (PDA). DoIT should continue to utilize Wireless technology, as it continues to become more secure and cheaper to use.