

**REPORT TO THE BOARD OF SUPERVISORS
FAIRFAX COUNTY, VIRGINIA**

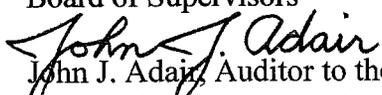
**QUARTERLY STATUS REPORT ON OPERATIONS
AS OF SEPTEMBER 20, 2005**



OFFICE OF FINANCIAL AND PROGRAMS AUDITOR

FAIRFAX COUNTY, VIRGINIA

MEMORANDUM

TO: Board of Supervisors
FROM:  John J. Adair, Auditor to the Board
Office of Financial and Programs Auditor
DATE: September 20, 2005
SUBJECT: Quarterly Status Report on Operations

EXECUTIVE SUMMARY

The County's Fleet Utilization Management Committee completed its review of vehicles that had low usage during Fiscal Year 2005. The Committee forwarded its recommendations to the Deputy County Executives for review. When this review was completed, it was determined that 35 vehicles would be recommended for turn-in, of which 6 would be reallocated to agencies based on new positions included in the FY 2006 Adopted Budget Plan, and the remaining 29 would be removed from the fleet.

This recommendation was approved by the County Executive, who notified agencies on September 1, 2005, that the 29 vehicles should be turned in no later than October 7, 2005. Agencies were given 30 days to appeal the final recommendations of the Committee to the County Executive. We will report on the final number of vehicles turned in, and the resultant cost savings, in our next Quarterly Status Report.

We continued our review of the County's computer aided dispatch (CAD) system. More than 400 problems involving operation of the most recently purchased software for the CAD system, called Altaris, were corrected by the contractor at no cost to the County by the end of July. However, the CAD system is operating on outdated hardware and software, and the County intends to replace it over the next two or three years.

The CAD system will be part of the new Public Safety and Transportation Operations Center that the County is planning to construct and open by November 2007. Because of the cost and relatively short time frame to complete the construction of the project, we will be monitoring and reporting on the County's adherence to the cost and construction timeline for the new Center over the next two years.

We also began reviews of background investigations conducted by the County, and vehicle maintenance costs incurred by County agencies. We will continue these reviews, as well as the CAD system and Public Safety and Transportation Operations Center reviews, during the next quarter.

**CONTINUED REVIEW OF
UNDER UTILIZED VEHICLES**

After a review of the County's vehicle fleet, the County Executive announced in January 2005 that 117 vehicles with low usage in Fiscal Year 2004 would be rotated, reassigned, or sold. These vehicles were to be turned in to the Department of Vehicle Services facility that maintains them as soon as possible.

This quarter, the Fleet Utilization Management Committee completed its analysis of vehicles that had low usage in Fiscal Year 2005.

**Analysis of FY 2005
Low Mileage Vehicles**

On May 5, 2005, the Director, Department of Vehicle Services, sent a memo to each Department that had vehicles driven less than 4,500 miles in the 12 month period ending March 31, 2005.

The memos requested that Departments complete a low mileage analysis questionnaire for each of 244 vehicles identified as low utilization and return them no later than May 27, 2005.

Departments were asked to provide information on the operational impact to the Department of losing a vehicle, and to provide other information that would aid the Fleet Utilization Management Committee in its decision.

The Fleet Utilization Management Committee met in July 2005 to provide recommendations as to which vehicles should be retained and which should be turned in to the Department of Vehicle Services.

After reviewing the justifications for retaining the 244 vehicles, the Committee recommended that 32 vehicles be designated as Full Exemption, meaning that these vehicles will not be included in the low usage analysis in the future. The types of vehicles designated as Full Exemption included several that had been customized with wheelchair lifts, or were for animal transport.

Other Full exemption vehicles included those with a special use, such as for Police undercover work, prisoner transport, chain of custody transport for large items, and driver's education.

Another 60 vehicles with low usage will not be recalled at this time because they have been designated as being for special use for golf courses, equipment transport, snow removal, towing, welding equipment transport, court transport, or other reasons, or were the only vehicle at a site that needed a vehicle. These vehicles may be retained by

agencies as long as they continue to be used for the same purpose. Removing these 92 vehicles from the base left 152 vehicles for consideration.

While reviewing the remaining 152 vehicles, the Committee recognized that agencies that lost a large number of vehicles earlier this year would undoubtedly be putting more miles on their remaining vehicles. For example, the Department of Housing and Community Development had to turn in 12 vehicles in early February 2005. Accordingly, the Committee determined that even though 7 DHCD vehicles had been driven under 4,500 miles in the past 12 months, they would in all likelihood have a substantial increase in future mileage due to the loss of the 12 vehicles.

The same rationale was used for 20 low usage vehicles at the Department of Family Services. However, the Committee will continue to monitor these vehicles, along with the other low usage vehicles, to make sure they are still needed.

Upon completion of its review of the low utilization vehicles, the Committee forwarded its recommendations to the Deputy County Executives for review. When this review was completed, it was determined that 35 vehicles would be recommended for turn-in, of which 6 would be reallocated based on new positions included in the FY 2006 Adopted Budget Plan, and the remaining 29 would be removed from the fleet.

This recommendation was forwarded to and approved by the County Executive, who notified agencies on September 1, 2005, that the 29 vehicles should be turned in no later than October 7, 2005. Agencies were given 30 days to appeal the final recommendations of the Committee to the County Executive.

We will report on the final number of vehicles turned in, and the resultant cost savings, in our next Quarterly Status Report.

REVIEW OF COMPUTER AIDED DISPATCH SYSTEM CONTRACTS

Our July 2005 Quarterly Status Report discussed problems involving the County's Computer Aided Dispatch (CAD) System which handles emergency call receipt and routing, Police and Fire and Rescue dispatching, and Field Unit deployment.

Serious problems, such as periods of severe slowdowns and unanticipated downtime, had occurred after award of the most recent contract to modify the CAD system.

The CAD system was acquired in November 2000 on a sole source basis from Litton PRC, (purchased by Northrop Grumman in 2003), and became operational in May 2004.

The Board of Supervisors directed our Office in April 2005 to review and report on the CAD system acquisition and provide recommendations for policy or procedures that will prevent a repetition or recurrence of such problems.

This quarter, we noted that the more than 400 technical problems that had plagued the system had been corrected by the contractor at no cost to the County, and the system appears to be working as intended. However, the CAD system is operating on outdated hardware and software, and the County intends to replace it over the next two or three years.

Plans for Altaris Cad Replacement

The Independent Validation and Verification of the Altaris CAD Implementation Study, completed in December 2004 by the consulting firm of Winbourne & Costas, Inc., pointed out that the current Altaris CAD platform is not suited to providing the required capabilities for Fairfax County and is not technologically sustainable for the long-term.

The County has determined that the standard system lifecycle for public safety information systems is between 7 and 10 years. The core of the Altaris system was developed by Northrop Grumman in 1997, and it was based on a core product developed in the early 1990's. The County procured the Altaris upgrade in 2000, and went live in May 2004 with the system. As a result, by the time the system went live in 2004, it was already near the end of the standard system lifecycle.

The County believes that it is necessary and prudent to begin the process to replace the CAD and records management system prior to 2007 when the new Public Safety and Transportation Operations Center is scheduled to open. The County anticipates that the replacement process, which includes competitive procurement, development and implementation activities, will take approximately two years to complete.

The County has been assessing current industry standards and operational best practices for integrated public safety systems, and has been collecting detailed functional and technical requirements to support a Request for Proposal for a modern CAD and public safety records management system.

During this quarter, the County sent out a request for qualifications to more than 900 companies. Responses were due by September 16, 2005.

We believe that the County is using lessons learned from its purchase of the CAD Altaris system to ensure the best procurement of a new CAD and records management system. In accordance with the request of the Audit Committee, we will continue to review and report on the activities associated with the procurement of the new system.

**PUBLIC SAFETY AND TRANSPORTATION
OPERATIONS CENTER COSTS**

The County created a new Department of Public Safety Communications effective July 1, 2005, and plans to build and open a new Public Safety and Transportation Operations Center (PSTOC) by November 2007.

The Center, which will be high security and state of the art, will provide public safety and transportation services using coordinated technology and integrated data systems between Fairfax County, the Virginia Department of Transportation, and the Virginia State Police. The Center also will include an improved Fairfax County Emergency Operations Center, and a new Public Safety Communications Center that will improve the central routing for all 911 calls received in the County.

Also included in this project, but housed in a separate building, is the Fairfax County Police Department Forensics Facility, including the Crime Scene Section, the Electronic Surveillance Unit, the DNA Laboratory, and NOVARIS (the Northern Virginia Regional Identification System).

The total planned area under roof for the two buildings is 147,000 square feet, and the construction costs, excluding site infrastructure, are estimated at about \$51 million. The County's share of PSTOC, which includes the Emergency Operations Center and Public Safety Communications Center, is \$102.5 million. The Commonwealth of Virginia's share of PSTOC is about \$20 million. The forensics Facility, which is being co-located with PSTOC, is an additional \$13 million. The total cost of PSTOC including the County and Commonwealth amounts and the Forensics Facility is \$135.5 million.

Because of the cost and relatively short time frame to complete the construction of the project, our office was asked to monitor the project to help provide assurance that it will be completed on time and within budget and will deliver the expected functionality.

During this quarter, County staff conducted a value engineering study for the PSTOC facility that will help reduce its costs. However, the County Executive cautioned that virtually all major County capital construction projects are being adversely affected by the significant ongoing escalation of construction costs.

**Value Engineering Study
Completed for the Public Safety and
Transportation Operations Center**

During this quarter, the County conducted a Value Engineering study of the PSTOC construction. Suggestions were made to improve the project, and to reduce costs where feasible. The study was conducted July 26 – 29 by a 13 person multi-disciplined team, and concentrated on the design concepts available at this stage of design.

The value engineering report shows that recommendations adopted will result in a net cost reduction estimated by County staff to be about \$1.046 million.

Examples of the recommendations that were adopted and the estimated savings include:

- Using stamped concrete instead of vehicular and pedestrian pavers at parking lot turn-a-round and at main and employee entries and court yard to save \$400,100.
- Eliminating glass sidelights at office doors to save \$295,420
- Providing painted gypsum board instead of wood panels at various locations including main lobby and communications center to save \$182,400
- Eliminating the proposed underground site irrigation system to save \$125,475
- Using ground cover and plantings instead of pedestrian pavers for the majority of the courtyard, with minimal path of pedestrian pavers, to save \$75,700.
- Providing split-face concrete block, instead of brick exterior, at Forensics building to save \$73,400
- Using terrazzo tile at public lobby and corridor to administration instead of epoxy terrazzo flooring to save \$63,500
- Reducing number of emergency call boxes from 4 to 2 per parking lot, and change placement to middle of lot to save \$48,200
- Eliminating acoustical tile and tectum panel ceilings in storage and vehicle bay in warehouse area to save \$36,700
- Using 5 inch slab on grade (regularly used for office type environments) instead of 6 inch slab on grade everywhere except mechanical room to save \$25,000

The savings are calculated on a life-cycle basis using an interest rate of 3.5% and a life of 25 years, although it is recognized that some parts of the design will have a service life greater than this period.

**Construction Costs
Are Escalating for
County Projects**

While the County will achieve significant savings as a result of the value engineering study, material cost increases and skilled labor shortages have made it difficult for the County to manage previously established budgets for its capital construction projects.

The County Executive discussed these issues in a memo to the Board of Supervisors on June 24, 2005, entitled Capital Construction Cost Trends. He said that:

- The level of construction activity in Fairfax County is continuing at a brisk pace, and the level of activity is resulting in bid prices that often exceed County project estimates.
- Construction bids received by the Department of Public Works and Environmental Services (DPWES) since January 2004 have been on average 13% higher than pre bid estimated costs.
- Fairfax County Public Schools, Loudoun County, Montgomery County and the Virginia Department of Transportation have experienced similar escalation of construction costs.
- The recent construction cost escalations can be attributed to the increases in the construction material costs and a strong local construction market combined with skilled labor shortages.
- Budgets for virtually all major DPWES capital construction projects, established over a year ago, are being adversely impacted by this significant ongoing escalation of construction costs.

At this time, the PSTOC project appears to be moving along in accordance with the time schedule and at the estimated cost. The County received favorable competitive bids on September 8, 2005, to complete the site infrastructure work. The bids were below the County's engineer's estimated cost. An information item for contract award will be prepared for consideration by the Board of Supervisors at its September 26, 2005, meeting. The intent is to begin construction of the site infrastructure in early October 2005.

We will continue to provide periodic updates as to the status of the PSTOC project in future quarterly status reports.

**ADDITIONAL REVIEWS AND
WORK TO BE PERFORMED
DURING THE NEXT QUARTER**

We also began reviews of background investigations conducted by the County, and are looking at vehicle maintenance costs incurred by County agencies. We will continue these reviews, as well as the CAD system and Public Safety and Transportation Operations Center reviews, during the next quarter.

