GO Committee #4
April 13, 2011

Worksession

MEMORANDUM

April 11, 2011

TO: Government Operations and Fiscal Policy Committee

FROM: Dr. Costis Toregas, Council IT Adviser

SUBJECT: FY12 Operating Budget NDA for Desktop Computer Modernization (DCM), Sections 65-6 and 65-7 in the Executive's Recommended Budget

The following are expected to attend:
E. Steven Emanuel, Chief Information Officer, DTS
Dieter Klinger, DTS
John Cuff, Office of Management and Budget (OMB)

The relevant pages from the proposed FY12 Operating Budget of the County Executive are attached on © 1 and 2.

Summary of Staff Recommendation
Reduce the Executive's recommended funding level for the Desktop Computer Modernization program by $830,000 **to $3,985,470,** but **retain** the target replacement number **of 2,400** units by introducing lower cost and equal or higher utility computers, such as tablets.

Overview

For FY12, the Executive recommends a budget of $4,815,470 for the Desktop Computer Modernization program (DCM), an overall increased reduction of $1,634,520 or 51.4% from last year. The details of the requested resources are provided in the table below:

	FY11 Approved	FY12 Recommended	Change	% Change
DCM Program	$3,180,950	4,815,470	$1,634,520	+ 51.4%

This increase of $1,634,520 is made up of two components:

1. An increase in support of $2,996,300 primarily dedicated to replacing 2,400 units that are beyond their recommended useful lives, and the initiation of a migration from Windows XP (the current operating system) to the new Windows 7 platform.
2. A decrease of $1,361,780, primarily reducing contracted support services; this will impact service levels for end users.

Replacing equipment

It is estimated that the County has 9,913 PC systems (as of November 2010). The age of these systems is as follows:

	Number of systems
1 year	296
2 years	2291
3 years	2869
4 years	2664
5 years	1579
6+ years	214
Total	9913

The Executive is proposing a return to the 4 year replacement cycle recommended by the recently updated ITPCC report through the purchase of 2,400 new systems. In addition, the file servers critical to a majority of County applications are aging as well; their replacement is also a prudent move. The following estimate of server age provided by DTS during last year's budget discussions serves as a marker for this important resource:

Projected Server Age at the end of FY11

2 years	3 years	4 years	5 years	6 years	Over 6 years
10%	5%	7%	10%	19%	49%

The Executive is prudent in his desire to replenish the aging infrastructure with new equipment. However, the constant technology changes in the marketplace have brought new options to the mix that are not currently supported by the DCM program: thin clients (stripped down versions of PCs) and tablets (such as the popular iPad). Both devices have price points well below $500 and offer many desired services which may suffice for many (but not all) County employees.

There is another change in the marketplace that should impact the major investment currently contemplated by the Executive in DCM: the launch last year of Windows 7 (two generations ahead of the Windows XP system currently in use by the County) and the announcement that Windows XP will not be supported beyond 2014. This reality should encourage DTS to re-explore options such as thin clients and tablets and provide a new mix of equipment in DTS with lower cost and stronger functionality. In order to explore this option, Staff asked the following question; the answer from DTS follows.

Staff question: What is the strategy for tablets and other possible PC replacements?

> ***Response:***
> *DTS realizes that new technologies are readily accessible and that adoption in the consumer market will drive a need to address new tools such as tablets, Net-books and other smart, compact technologies. The immediate challenges include the ability to support these solutions, not just from a physical perspective, but from a secured information delivery aspect as well.*
>
> *In addition to the need for a strategy that addresses customer needs and support of the newer technologies, as an enterprise solutions group, DTS also must take into consideration the current structure of business solutions and the ability to ensure that a physical device transition will not create impediments to the use of the current system and information delivery.*
>
> *The County has developed a robust method for delivering information. The County's use of web portal and both in-network and virtual private network (VPN) access has minimal limitations, and is also secure. However, not all solutions have been modernized or have the flexibility associated with newer information delivery models.*
>
> *As a result, the DCM standards, which ensure business system needs are globally met, drive the County's current plan. DCM continues to deliver hardware solutions that ensure capabilities of new modern solutions as well as older, legacy business system needs. In FY12, the DCM replacement process is clearly targeted to replace failing devices and those that are in imminent risk of failure. Coincident with the restoration of investment in the DCM program, legacy solutions continue to be engulfed by modern, web based solutions that do not rely on local client code. Consequently, technology infrastructure investments that adequately host service based demand or services will be considered, as will shifts to cloud/hosted options. Further, DCM will continue to verify that customer needs are not negatively impacted by a transition to consumer options, and DCM will make appropriate recommendations for technology equipment transitions.*
>
> *The DCM strategy remains committed to delivering manageable solutions that ensure business mission and goals are met through the use of the most efficient technology tools. Similar to the transition from desktops to laptops for the recognition of early mobility needs, DCM will make timely and supportable recommendations to changes in device standards that continue to demonstrate fiscal responsibility and the implementation of best practices based on the mission of the organization.*

It appears from the answer that many essential elements of a migration to modern, less costly elements of an IT strategy such as thin clients and tablets are in place (VPN, in-network secure access, web portal, and security). However, such a move is not contemplated in FY12. DTS should be encouraged to implement such a move now, as the user community may be willing, indeed may be eager, to endorse it, and the replacement costs could be significantly lower, thus enabling scarce county resources to stretch further.

To estimate the costs of this alternative option, a scenario where a mix of PCs and tablets would be procured in FY12 was developed. Several simplifying assumptions were made (e.g., the unit cost of PC replacement was derived simply by dividing the proposed increase, which includes Windows migration costs, by the number of units, an action that introduces some inaccuracies). In addition, new infrastructure and tablet costs reflect estimates and are not based on actual bids. However, the intent of the exercise is well served: to show the power of introducing desired new technologies at lower costs **and** reduce overall costs.

	Number of units	Budget	Unit price
Scenario 1			
PCs	2400	$2,830,500	1,180
Tablets	0		
Total Scenario 1		$2,830,500	
Scenario 2			
PCs	1,200	$1,416,000	1,180
Tablets	1,200	$ 480,000	400
New infrastructure		$ 100,000	
Total Scenario 2	2,400	$1,996,000	
Difference between Scenarios 1 and 2	0	$ 834,500 savings	

Note that Scenario 2 has the same number of units replaced (2,400), but the mix of equipment is changed and the cost is reduced by more than $830,000. It is this scenario 2 which leads to the analyst recommendation: reduce the requested DCM budget by $830,000, enrich the mix of equipment beyond PCs to tablets and other technologies, and provide a pathway to subsequent modernization moves. The Executive would have to accurately cost this option and ensure that resources are adequate to the task.

Reducing DCM service levels

The major reduction in the DCM contracted services ($1,160,540) is bound to have a significant effect on user satisfaction and system reliability. In order to gauge the extent of this proposed change, Staff asked, and DTS answered, the following question regarding their position on service reductions:

Staff question: There is a $1.160 million reduction in DCM management services. Please detail the impact to user agencies.

Response:
The reduction in the DCM contract will require a combination of actions and services level modifications to the following:

- *Certain services will be "in-sourced" from the Contractor to the County;*
- *Certain services will cease to be performed by the County given existing operational commitments and priorities;*

- *Certain services will incur per incident fees should Departments elect to utilize the services; and*
- *Departments will incur costs for replacement computer parts for out of warranty systems that were previously provided under the DCM contract.*

As a result of these reductions in service, the County may experience additional challenges associated with resuming DCM program services efficiencies once the County's fiscal situation improves and DCM contract services are restored. For example, the DCM contractor may experience staff reductions and/or turnover which would impair the County's ability to complete PC replacements and provision other seat management services in the future.

Several services will be "in-sourced" from the Contractor to the County. These services were previously provided under the DCM contract for full seat systems. These services include: testing of new PC images, help desk ticket monitoring and escalation, electronic software distribution and patching, and support for special projects (e.g., implementation of new operating systems and other productivity solutions). Where possible, work will be absorbed by County (both DTS and departmental) staff.

Departments may elect to incur per incident fees for several services previously provided under the DCM contract for full seat systems or perform the work with internal departmental staff. These services include:

- *Computer moves, adds and changes;*
- *Installation of replacement and loaner PC's;*
- *Break-fix support for non-warranty systems; and*
- *Desk-side support visits.*

There may be a significant impact on user productivity due to an increase in user down-time when hardware failures do occur. Departments will also be required to incur per incident fees for PC disposal services to assure computer and data security in accordance with County policies.

Additionally, the IT help desk will no longer accept requests for password resets. All password resets will be accomplished using the County's self-service password reset tool. Callers to the help-desk will be re-directed to the self-service website.

Last, Departments will incur costs for replacement computer parts for out of warranty systems that were previously covered under the DCM contract for full seat systems. There may be some impact as a result of system failure or user down time for front-line County employees who deal directly with the public.

Clearly, the impact of the deep cuts in contractor support is significant. It is important to ensure that these impacts are understood by the user departments, and to the degree necessary, that their budgets reflect the increased responsibilities now placed on them (per incident fees for moves, adds and changes, replacement part costs, etc.). This challenge is beyond the Committee's current discussion, but budgets of other departments must be reviewed with an eye towards such increases; an absence of an explicit budget recognition of this shift in service level support from DTS means an increased risk for departments in areas that depend on PCs and other equipment provided by the DCM program.

Funding is also included to reimburse the contractor for costs not covered by operations during accounting periods when losses occur. These costs will be offset by contractor payments to the County during accounting periods with operating gains. In FY12, funds have been included to complete the management audit as required by the Management Agreement between the County and Marriott International, Inc.

Revenues consisting of net operating income from the Conference Center and land rent from the hotel are also reflected in the NDA. Twenty percent of the County's net proceeds from Conference Center operations will be retained for investment in marketing and facility improvements that will increase Conference Center usage. All proposed investment expenditures will be reviewed and approved by the Conference Center Management Committee.

FY12 Recommended Changes	Expenditures	WYs
FY11 Approved	**567,400**	**1.0**
Add: Funding for the FY12 Management Audit	50,000	0.0
Increase Cost: Group Insurance Adjustment	110	0.0
FY12 CE Recommended	**617,510**	**1.0**

Council of Governments

The Metropolitan Washington Council of Governments (COG) is a voluntary association of major local governments in the Washington Metropolitan Area. COG seeks to provide regional answers to, and coordination of, area-wide issues such as air and water pollution, day care, housing, crime, water supply, land use, and transportation.

This NDA reflects Montgomery County's share of the organization's operation plus special COG initiatives. Additionally, the contribution supports the Cooperative Purchasing Program; the Anacostia Restoration Fund; the Regional Environmental Fund; the Airport Noise Abatement Program; and a membership fee for participation on a regional housing committee.

As in previous years, the Washington Suburban Sanitary Commission will provide Montgomery County's contribution to support the Water Resources Management Planning Program and the Blue Plains Users Program.

FY12 Recommended Changes	Expenditures	WYs
FY11 Approved	**754,500**	**0.0**
Decrease Cost: Annualization of FY11 Operating Expenses	-11,560	0.0
FY12 CE Recommended	**742,940**	**0.0**

County Associations

This NDA funds Montgomery County membership dues to the National Association of Counties (NACo) and the Maryland Association of Counties (MACo).

FY12 Recommended Changes	Expenditures	WYs
FY11 Approved	**72,710**	**0.0**
FY12 CE Recommended	**72,710**	**0.0**

Desktop Computer Modernization

The Desktop Computer Modernization (DCM) program is based on a best practices approach to maintaining a modern and cost effective computing environment in the County. The program reduces the Total Cost of Ownership (TCO) of personal computers (PCs) and laptops through standardization, asset management, and maintenance services. DCM includes the centralized management, support, and maintenance of PCs and targets the annual replacement of approximately one-fourth of managed PCs. The program also includes PC-related training and software. This NDA includes funding for Help Desk support, management, maintenance, and replacement of PCs.

For FY12, the County Executive recommends resuming the scheduled replacement of desktop computers. Currently 45% of County Government PC's, laptops and workstations are 4 years old or older. 18% are 5 years old or older. These units are at the end of their useful life and catastrophic device failures will increase, with visible negative impacts to both county employees and residents.

Further, Microsoft's Windows XP operating system is at the end of its lifecycle and will not be supported beyond April, 2014. Windows 7, Microsoft's new operating system, requires more robust hardware to operate correctly. Old systems will not work properly with the newest systems (without significant support requirements, expanding support resources) across the network resulting in degraded interoperability and communications. Risk of computer security incidents and compromise will increase,

(1)

without proactive remediation and modernization. Systems operating Windows XP will not receive any security or product updates when support ends. This makes them highly vulnerable to malicious attacks and presents a security risk to the organization.

FY12 Recommended Changes	Expenditures	WYs
FY11 Approved	**3,180,950**	**0.0**
Add: Replace 2,400 High-Risk End of Life Personal Computers, Laptops and Workstations, and Begin Windows 7 Migration.	2,830,500	0.0
Increase Cost: Software Maintenance for the DCM Program	165,800	0.0
Decrease Cost: Enterprise Server Replacement (Master Lease Agreement)	-36,590	0.0
Decrease Cost: Public Safety Servers (Master Lease Agreement)	-164,650	0.0
Reduce: DCM Seat Management Services	-1,160,540	0.0
FY12 CE Recommended	**4,815,470**	**0.0**

Future Federal/State/Other Grants

This NDA enables the County to implement new grant-funded programs up to $200,000 each and provides funds for grant continuations and enhancements without having to process individual supplemental appropriations through the County Council. Upon approval by the County Executive, funds in this program are transferred to the receiving department's grant account.

FY12 Recommended Changes	Expenditures	WYs
FY11 Approved	**20,000,000**	**0.0**
FY12 CE Recommended	**20,000,000**	**0.0**

Grants to Municipalities in Lieu of Shares Tax

This NDA funds payments required in accordance with State law. The 1968 Session of the General Assembly revised the tax structure to include a County income tax. As part of this restructuring, the shared tax on banks and financial institutions was eliminated, and a provision was adopted which requires counties to pay annually to municipalities the amount ($28,020) which had been received by the municipalities in FY68.

FY12 Recommended Changes	Expenditures	WYs
FY11 Approved	**28,020**	**0.0**
FY12 CE Recommended	**28,020**	**0.0**

Group Insurance for Retirees

Group insurance is provided to an estimated 4,464 retired County employees and survivors, as well as retirees of participating outside agencies. Employees hired before January 1, 1987, are eligible upon retirement to pay 20 percent of the premium for health and life insurance for the same number of years (after retirement) that they were eligible to participate in the group insurance plan as an active employee. The County government pays the remaining 80 percent of the premium. Thereafter, these retirees pay 100 percent of the premium. Employees hired before January 1, 1987, are also offered the option at retirement to convert from the 20/80 arrangement to a lifetime cost sharing option.

Employees hired after January 1, 1987, are eligible upon retirement for a lifetime cost sharing option under which the County pays 70 percent of the premium and the retiree pays 30 percent of the premium for life for retirees who were eligible to participate in the County group insurance plan for 15 or more years as active employees. Minimum participation eligibility of five years as an active employee is necessary to be eligible for the lifetime plan. The County will pay 50 percent of the premium for retirees with five years of participation as an active employee. The County contribution to the payment of the premium increases by two percent for each additional year of participation up to the 70 percent maximum.

On March 5, 2002, the County Council approved a one-time opportunity for retirees still under the 20/80 arrangement with an expiration date to elect the lifetime cost sharing arrangement. The new percentage paid by the County for those electing this arrangement ranges from 50 percent to 68 percent, depending upon years of active eligibility under the plan and years since retirement. The cost sharing election process has been completed.

The budget does not include employer contributions from participating outside agencies.

FY12 Recommended Changes	Expenditures	WYs
FY11 Approved	**31,096,730**	**0.0**
Increase Cost: Group Insurance Adjustment	1,365,720	0.0
FY12 CE Recommended	**32,462,450**	**0.0**