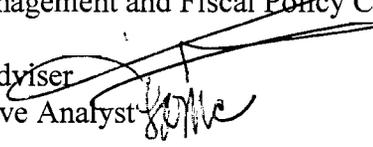


MEMORANDUM

October 11, 2010

TO: Public Safety Committee and Management and Fiscal Policy Committee

FROM: Dr. Costis Toregas, Council IT Adviser
Linda McMillan, Senior Legislative Analyst 

SUBJECT: **Worksession:** Amendment to the FY11-16 Capital Improvements Program and Supplemental Appropriation to the FY11 Capital Budget
Montgomery County Government
Department of Technology Services
Public Safety System Modernization
\$21,616,000 (Source of Funds: Short-Term Financing)

Background

- The Federal Communications Commission (FCC) is requiring certain public safety radio systems operating in the 800 MHz frequency range to “re-band” to a specific part of the 800 MHz frequency in order to reduce interference with Sprint/Nextel communications. This re-banding is overseen by a regional Plan Administrator. Sprint/Nextel is required to cover the costs of this re-banding. This re-banding is completely separate from the county’s planning for a new or upgraded public safety radio system.
- This supplemental appropriation and CIP amendment request was forwarded by the County Executive on September 29, 2010.
- The joint PS/MFP Committee was briefed by the Executive branch on the proposal at its October 4, 2010 worksession.
- The Council introduced the request at its October 5, 2010 session. A public hearing is scheduled for Tuesday, October 26, 2010 at 1:30 p.m. Action is tentatively scheduled for October 26th as well.

- The Executive’s proposal includes a November 5, 2010 response deadline for letting Sprint/Nextel know whether the county will accept a \$3.3 million payment in lieu of requiring Sprint/Nextel to complete a loaner program that would meet the FCC requirements for re-banding.
- The Executive’s proposal increases the 6-year cost of the PSSM CIP project by \$3.043 million. The reason the supplemental appropriation request is for \$21.6 million is because all the public safety radios would be purchased in FY11, rather than being spread-out from FY11 to FY14. It is not a request for an additional \$21.6 million.

Responses to Questions from October 4 PS/MFP Session

Attached at © 1-13 are responses to the questions posed at the October 4th joint Committee worksession. Council staff has had limited time to review this information and expects to provide additional comment and analysis at the worksession. However, Council staff suggests that Committee consider the attached information in the context of three options. Under each option the required immediate re-banding is still accomplished.

1) Do not approve the requested amendment/supplemental and the \$3.3 million payment from Sprint/Nextel.

Council staff sees the main **advantages** of this option as (1) avoidance of additional debt service in FY13 when there is only a small increase in the projected resources available to fund all agencies; (2) avoidance of any real or perceived decision about the vendor for the new radio system that is in the planning stage and associated equipment.

Budget impacts of accelerated radio purchase.

The adopted Fiscal Plan (©16-17) projects the total expected resources available to fund all agencies through FY16. The following table shows the amount of additional revenues/resources expected and the **net impact from the acceleration of the short-term financing.** (see ©9; OMB assumes and applies the \$3.3 million payment in FY12 and FY13)

In millions	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total additional resources available	\$81.400	\$19.000	\$140.600	\$190.000	\$172.400	NA	NA	NA
Net increase or (decrease) to debt service in approved Fiscal Plan	\$0	\$3.079	\$2.027	(\$0.106)	(\$1.395)	(\$1.816)	(\$1.439)	\$1.135

The net increase for the short-term financing from FY12 to FY19 is \$1.485 million

Council staff sees the main **disadvantages** of this option as (1) continued purchase of Motorola XTS5000 radios which Executive staff has now argued are inferior to APX7000 radios in terms of ease of interoperability and life-span; (2) inability to achieve operational ease and budget savings associated with reducing the times radios must actually be “touched” by the DTS radio shop. (See ©12 for Executive’s estimate of savings and cost avoidance. Council staff still has questions about whether some of the items in this list will result in an actual budget reduction.)

2) Approve the Executive’s proposal and accept the \$3.3 million payment from Sprint/Nextel

Council staff sees the main **advantages** to this option as: (1) the county would be purchasing equipment with a longer useful life with greater ease of interoperability with Prince George’s County and potentially other jurisdictions in the NCR, (2) **some** of the cost of moving to this new and more expensive radio for public safety would be covered by the \$3.3 million from Sprint/Nextel assuming that the county believes it should no longer purchase XTS5000 radios and that any radios purchased would be done with long-term financing, (3) reduction in the number of times radios must be installed and/or upgraded in vehicles. (Council staff is also concerned that there are not sufficient public safety radios programmed into the Executive’s proposal – Council staff is discussing this concern with Executive staff.)

Council staff sees the main **disadvantages** of this option as (1) the county being rushed into making a policy decision to now purchase APX7000 radios; (2) insufficient payment from Sprint/Nextel to actually cover the marginal cost of purchasing APX7000 radios as opposed to XTS5000 radios, and (3) letting a major purchase of portable and mobile radios influence future decisions about the design of a major strategic communication infrastructure for the county (letting the tail wag the dog).

3) Continue the Sprint/Nextel Loaner Program for the immediate re-banding but amend the PSSM CIP project to stop the scheduled purchase of XTS5000 radios until the county has completed its implementation of the Strategic Plan for the total public safety system.

Given the information provided by the Executive branch, Council staff questions whether the approved scheduled purchase of XTS5000 radios is a wise use of funds. Perhaps, the county should only purchase radios when they are needed to replace broken equipment and move forward with determining the specifications for the new radio system. There could be some short-term savings from this option. The county would then be able to competitively bid both radio and infrastructure needs.



DEPARTMENT OF TECHNOLOGY SERVICES

Isiah Leggett
County Executive

E. Steven Emanuel
Chief Information Officer

MEMORANDUM

October 11, 2010

TO: Linda McMillan, Sr. Legislative Analyst
Costis Torgas, Council IT Advisor,

FROM: Thomas Manger, Chief of Police
Richard Bowers, Fire Chief
Michael Ferrara, TechMod/PSSM, Executive Director
E. Steven Emanuel, Chief Information Officer

SUBJECT: Responses to Questions – Public Safety Systems Modernization
CIP Amendment

Pursuant to information request and discussion of October 4, 2010, the leadership team inclusive of the Executive branch has assembled, in written format, answers to questions that arose from the review of the Executive's recommendation to amend to the Public Safety Systems Modernization program, relative to the purchase of new public safety radio units on an advanced schedule.

We believe that we have addressed in a comprehensive fashion, the issues that were raised and can ratify that this is a significant priority for Public Safety operations and is an investment that provides both short and long term benefits.

We look forward to the opportunity to speak to the amendment recommendation and the benefits of making this change for positive and proactive technical and business operations advancements.

Cc: T. Firestine
M. Knuppel

Suggested Questions to be Addressed at a Future Session

The following are questions the joint Committee may want to have answered in the next two weeks in order for the joint Committee and Council to have the information needed to make a decision on this request.

1. This project was just approved in May after many work sessions and agreement on how to move forward with the modernization of the public safety communications system. When did Sprint/Nextel and the Plan Administrator first make this proposal?

The Partial Payment in Lieu of Re-banding (PILR) was introduced in June 2010. The PILR was an amendment to the Frequency Reconfiguration Agreement (FRA).

For clarification or understanding of the scope of this request, note the following:

1. **The Public Safety System Modernization Plan (PSSM CIP Project) is our long-term or five year plan as presented and approved by Council in May 2010. Key components of the PSSM CIP project includes, the planning, implementation, and migration of the existing communications infrastructure to a national standards-based radio communication technology platform (Project 25 (P25) Standards) as well as replace all portable and mobile subscriber units.**
2. **The 800 MHz Re-banding effort, via Sprint/Nextel, is a parallel Federal Communications Commission (FCC) mandate imposed on all licensees of the 800 MHz Frequency Spectrum. As a licensee, the County must comply with the mandate.**
3. **The majority of the County's current subscriber radios have reached their end-of-life in terms of compatibility, interoperability, manufacturer's warranty, and support coverage. Additionally, the County must use the COG-authorized zone doubling methodology and the existing radios do not have that capacity. Zone doubling is necessary in implementing the new frequency requirements.**
4. **The PILR amount will be paid in lieu of the loaner subscriber radios associated with the second touch of all Public Safety portable and mobiles radios only.**

In light of the above intersecting requirements, the County would be capitalizing on an opportunity to achieve a major portion of our modernization goals, realizing a substantial cost savings and avoidance, while fulfilling our responsibility to re-band our system. A timely and successful re-banding of the 800 MHz frequencies with the new subscriber radios in place will facilitate migration of the existing communications infrastructure to a future P25 standards platform. This will ensure that the County has the maximum flexibility for regional Public Safety communications interoperability.

2. In May, it was estimated that the cost over the six years would be \$54.8 million. If \$3.3 million are received from Sprint/Nextel, why doesn't it reduce the cost to the County rather than increase it?

This amendment request represents a significant upgrade in the type of public safety radio to be purchased from the previously planned Motorola's Model 5000 model. The recommended upgrade to the APX7000 models will have a longer useful life than the original Model 5000 devices, provide multi-band interoperability, comply with P-25 standards and offer up-to-date "next generation" options. It should also be noted that acquisition of the Model 5000 radio would have required replacement of these radios within 3-4 years at a cost of another approximately \$24 million. In addition, the APX7000 next generation radios come equipped with AES Encryption capability which will become a requirement beginning in 2011 as discussed at several COG Communications meetings

Acceptance of the PILR plan will accelerate implementation of the radio project within the CIP, reduce post re-banding operational costs, and allow the County to take advantage of the \$3.3 million PILR funding from Sprint/Nextel. While an additional appropriation is required for this project, this is offset by the additional PILR funding of \$3.3 million noted above as well as a reduction in future operating costs maintenance contracts and County labor costs.

The PILR payment of \$3.3 million is recommended to be applied to reduce debt service on the purchase on new radios in FY12 and FY13.

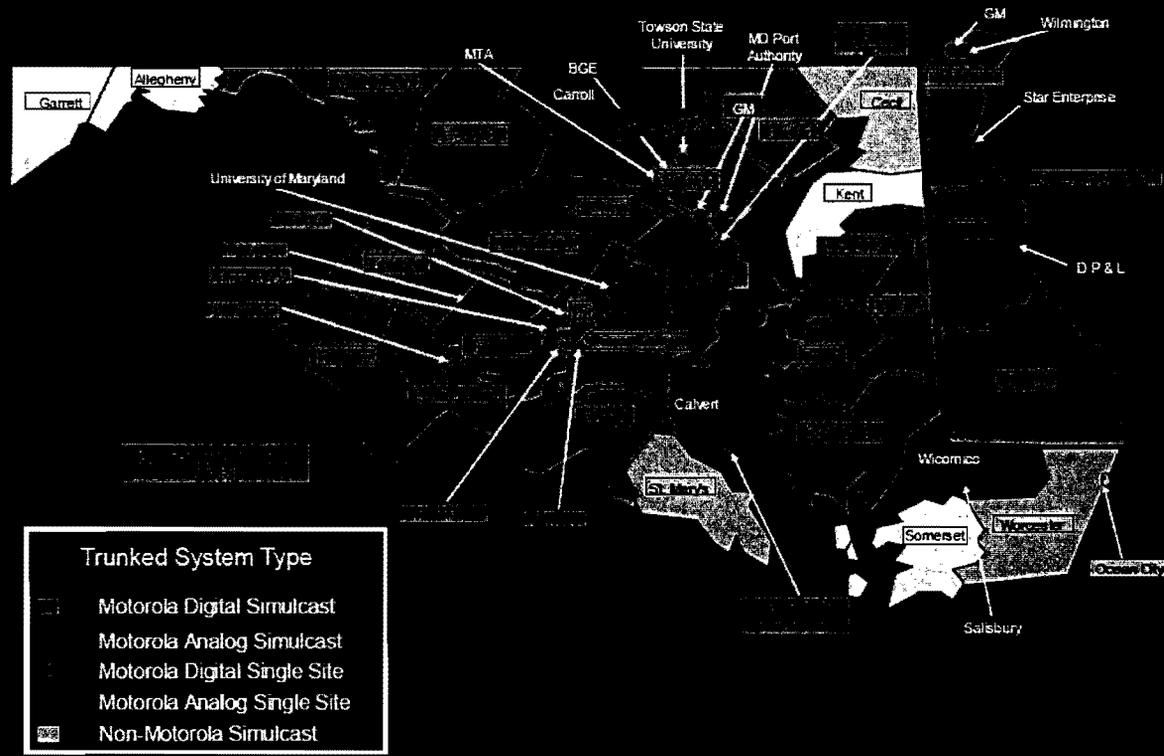
See attached exhibit A "PSSM Capital Cost & Debt Service Cost Changes."

3. The region's radio systems, frequencies they use, and the timing for when interoperability becomes feasible should be made part of the decision package; the technologies and financial commitments of Fairfax and Prince George's Counties and the District of Columbia as a starter remain anecdotal. The real facts should be produced and verified; else Montgomery County may have to pay additional dollars for interoperability because of misunderstandings, etc. Ultimately Montgomery County should not commit major funds without a written regional compact to be signed by elected bodies committing to fund the necessary infrastructure and radios in a way that produces interoperability at a time certain.

The County is an integral part of the National Capital Region (NCR) Coalition Group formed with the primary goal of fostering and maintaining integrity of the overall region's interoperability capabilities. Because of the complexity and already integrated capabilities that exist in the region, the NCR Coalition has proposed a simultaneous cut-over for all the jurisdictions within the region.

Several Maryland and Virginia county and local governments have made significant progress in upgrading their subscriber radios and deploying a P25 compatible communication system; they include Arlington, Fairfax, Frederick, Loudoun, Prince George's County, Baltimore County, and the District of Columbia among others. The map and chart below show the current vendors or hardware infrastructure manufacturers of the various counties and Cities in the National Capital Region:

DE/MD/NoVA Trunked Systems



Trunked Systems by NCR Jurisdiction

Anne Arundel County, MD	800 MHz	Motorola ASTRO 4.1 System
Arlington County, VA	800 MHz	Motorola ASTRO 25 FDMA System
Baltimore County, MD	800 MHz	Motorola ASTRO 25 FDMA System
Baltimore Washinton International Airport	800 MHz	Motorola ASTRO 25 FDMA System
Calvert County, MD	800 MHz	Motorola Analog SmartNet System
Carroll County, MD	800 MHz	Motorola Analog SmartNet System
Cecil County, MD	800 MHz	M/A-COM EDACS System
Charles County, MD	800 MHz	Motorola ASTRO 4.1 System
City of Alexandria	800 MHz	Motorola ASTRO 25 FDMA System
City of Annapolis, MD	800 MHz	Motorola ASTRO 4.1 System
City of Baltimore, MD	800 MHz	Motorola ASTRO 25 FDMA System
City of Richmond, VA	800 MHz	Motorola ASTRO 3.0 System
District of Columbia (DC)	800 MHz	Motorola ASTRO 25 FDMA System
Dorchester County, MD	800 MHz	Motorola ASTRO 4.1 System
Fairfax County, VA	800 MHz	Motorola ASTRO 25 FDMA System
Fairfax County, VA	800 MHz	Motorola ASTRO 3.0 System
Faquier County, VA	800 MHz	Motorola ASTRO 4.1 System
Frederick County, MD	800 MHz	Motorola ASTRO 25 FDMA System
Hampton Roads Region, VA	700 MHz	Motorola ASTRO 25 FDMA System
Harford County, MD	800 MHz	Motorola ASTRO 4.1 System
Howard County, MD	800 MHz	Motorola ASTRO 3.0 System
Kent County, MD	VHF	Voting System
Loudon County, VA	800 MHz	Motorola ASTRO 25 TDMA System
Metropolitan Washington Airport Authority (MWAA)	800 MHz	Motorola ASTRO 4.1 System
Montgomery County, MD	800 MHz	Motorola ASTRO 3.0 System
Ocean City, MD	800 MHz	M/A-COM EDACS System
Prince George's County, MD	700 MHz	Motorola ASTRO 25 TDMA System
Prince William County, VA	800 MHz	Motorola ASTRO 4.1 System
Somerset County, MD	800 MHz	M/A-COM EDACS System
State of Delaware	800 MHz	Motorola ASTRO 4.1 System
UMDES	800 MHz	Motorola ASTRO 3.0 System
Washington County, MD	UHF	Motorola ASTRO 25 FDMA System
Washington Metro Area Transit Authority (WMATA)	800 MHz	Motorola ASTRO 3.0 System
Wicomico County, MD	800 MHz	Motorola Analog SmartNet System
Wicomico County, MD	800 MHz	M/A-COM EDACS System
York/James City/Gloucester County, VA	800 MHz	Motorola ASTRO 25 FDMA System

4. The Sprint/Nextel \$3.3 million is what they feel is THEIR cost. Wasn't the agreement that they should cover OUR cost of re-banding? If this is not the full amount, when does that ultimate payment get made, and at what dollar level?

The \$3.3 million PILR offer is to be used toward the purchase of 4186 public safety subscriber mobile and portable radios associated with the second touch only. It excludes all non-public safety users who are not impacted or mandated by interoperability requirements.

In addition to the above, Sprint is also paying an estimated \$5.8 million for the remainder of the County's re-banding costs as follows:

- **Technical Consultation and Services** - \$873K
- **Administrative Consultation, FCC Compliance & other** - \$465K
- **Legal advice** - \$104K
- **Motorola – infrastructure, subscriber units install services** - \$4.2M

The total estimated amount of \$9.1 million is what Sprint will be paying on be-half of the County for re-banding related costs. Note that payments are currently on-going.

5. What is the radio inventory that is impacted by this proposed acceleration? Does it include all the radios needed by the Park Police, Sheriff, Homeland Security, etc.?

Yes. It includes all portable and mobiles radios for all Public Safety agencies including: Montgomery County Police, Park Police, Sheriff, Fire and Rescue Services.

See attached exhibit B "PSSM – Radio Subscriber Units."

6. Does acceptance of this proposal impact any other elements of the total project such as planning and design for the CAD? (Staff understands that there may be some other issues impacting the schedule for CAD planning as well.)

CAD planning was temporarily put on hold for two main reasons –

- 1) for evaluating the funding options for the PILR amendment and**
- 2) MNCPP consolidation planning efforts.**

However, the submitted supplemental does not delay CAD or other elements included in the original CIP submission. The amendment request impact is on the radio portion of the project. The PSSM project team is meeting on October 15, 2010.

7. Has RCC given a report as to technologies other than the Motorola APX7000 model radios and how they may be as or more responsive to the Strategic Plan requirements? (For example the frequency-agile radio offered by Montgomery-based Thales and sold to the military.)

It is important to distinguish between the scope of our Public Safety Systems Modernization (PSSM) plan and the FCC's mandate to re-band our Public Safety frequencies (See Item #1 above).

The County currently operates a proprietary Motorola SmartZone 3.0 radio system; therefore, it was up to Motorola to respond to the FCC's Transitional Administrator (TA) with its solution.

The FCC's intent in re-banding is to take the current radio infrastructure and subscriber radios and retune them, while ensuring minimal impact on daily system operations during the retuning effort. The FCC nor Sprint/Nextel would allow the replacement of a radio system infrastructure under the guise of re-banding.

The quest to explore "other technologies" would apply to future choices under our PSSM project.

Points of consideration:

- 1) The entire NCR is Motorola-centric
- 2) Other Counties in the region have or are moving forward with, newer Motorola infrastructure and subscriber equipment.
- 3) The Motorola P-25 Standards platform has been the basis for many of the recent NCR awards, making them a stable and standardized solution that meets the interoperability requirements of the multiple jurisdictions in the NCR.
- 4) Our opportunity to utilize other vendors P-25 subscriber products will be realized when purchasing the remainder of our non-public safety user hardware.
- 5) Total costs related to operating two or more vendor offerings along with related training, accessories, parts and spares, etc.

8. What is the justification for not soliciting competitive bids for the required radios?

The County has a current contract to buy radios from Motorola. This contract is a "bridge contract," as authorized under the County's Procurement Regulation (COMCOR) 11B.00.01.04.1.15, to a contract between Motorola and Prince George's County which was competitively bid and awarded as a result of adequate competition.

In addition to related answers in #7 above, other justification also include:

- 1) Response Time - The Re-banding schedule requires an expedited turn-around. There is no time to go to bid or engage in a full RFP process.
- 2) Motorola, as our current vendor, was responsible for providing a way to re-band our existing system without incurring system downtime. Consequently, the Motorola's solution used a number of existing Motorola radio models and infrastructure solutions.
- 3) Severe regional constraints on the Re-banding project. Montgomery County is the final entity to come to an agreement with the TA and the entire National Capitol Region must wait to be re-banded together. Any additional delays will delay the re-banding process for all other NCR jurisdictions.
- 4) With the County's current contract in place, the use of Motorola greatly simplifies and expedites the purchase process to comply with the FCC mandate to re-band our existing subscriber radio units.

9. What is the fiscal impact of the recommended strategy on the cost of infrastructure deployment? The assumptions made for antennas, repeaters etc in the Approved PDF may change, and the magnitude of the change is not provided.

There are no adverse impacts on the current infrastructure expected, as the re-banding efforts will focus primarily on subscriber radios and the existing core system. Only minimal changes to the infrastructure will be required.

10. How do the current cost for the issuance of short-term financing and the associated debt service compare to the new proposal? Are there any changes in the terms of the short-term financing (such as length of financing or interest rate)? If the \$3.3 million is accepted by the County, will it be held in a restricted account so that it must only be used for the debt-service on these radios?

The approved project's radio financing assumptions were built on a series of 3-year short term leases, consistent with the expenditure schedule for the radios. With the change to:

- 1) purchase most of the radios in FY11, and a smaller number of radios in FY14, and**
- 2) to purchase upgraded radios with a longer useful life,**

the financing assumptions were changed as well.

The revised financing plan assumes a large up-front purchase of radios using 5-year financing, with lease payments commencing in FY 12 and ending in FY17, and a second tranche of financing with lease payments beginning in FY15 and ending in FY20. The difference in interest rates between a 3-year and 5-year lease are minimal.

The \$3.3 million PILR payment can be restricted as "committed fund balance" (pursuant to GASB54) and then could be applied to debt service only pursuant to specific language that can be added to the authorizing resolution approved by the County Council.

11. The proposed PDF states, "the County will avoid the significant operational challenges of installing loaner radios and subsequent re-installation of the original re-programmed radios after the frequency modifications have been made." What are the specific savings and will they result in an actual budget reduction or cost avoidance? Would not these costs have been covered by Sprint/Nextel?

See attached exhibit C – "PSSM Summary of Cost Avoidance."

The cost savings were conservatively derived from the costs associated with the "third touch" presuming that the loaner option was utilized. The costs assumed work hours of Public Safety personnel associated with the time spent to make the physical transition of radios, the costs associated with the delivery and final installation of new equipment after re-banding had been completed, the avoidance of both additional wiring harness accessories and after manufacturer warranty costs. The most significant costs reduction in the identified savings is the DTS contract costs by the current contractor (at the current rate) for the physical vehicle installations.

12. Why are we buying Motorola? This represents a chance to start anew, and several firms may be able to provide us with a new strategy to take advantage of competitive technologies and lower per unit costs.

As outlined in the approved PSSM CIP, there is a planned subsequent phase which will include replacement of the radio infrastructure. The Motorola radios being proposed under this plan are compliant with the P-25 Phase 2 standards. Therefore this procurement will not lock the County into procuring only a Motorola System when the radio infrastructure is upgraded.

13. A chart comparing the approved and proposed expenditures should be provided to simplify comparisons and help understand what will change under the proposed strategy.

See attached exhibit A “PSSM Capital Cost & Debt Service Cost Changes.”

14. What are the net benefits of accelerating a \$21.6 million expenditure in the first year of this 6 year effort?

Please see response to Question 2:

Acceptance of the PILR plan will accelerate implementation of the radio project within the CIP, reduce post re-banding operational costs, and allows the County to take advantage of the \$3.3 million PILR funding from Sprint/Nextel. While an additional appropriation is required for this project, this is offset by the additional PILR funding of \$3.3 million noted above as well as a reduction in future operating costs on maintenance contracts and County labor costs.

The following summarizes the advantages:

- **Minimal impact for FY11 using PILR funding to obviate FY11 incurred debt.**
- **Single (1) physical radio exchange for next 5-7 years with next generation capabilities.**
- **Installed now (avoids post re-banding replacements and loaner touch cycles).**
- **Single device support model operational costs are limited.**
- **Provides most up-to-date “next generation” options and portability.**

15. What is the impact of the PSSM short term borrowing on the County’s bonding capacity?

There is minimal impact on the debt capacity ratios.

See attached exhibit D – “PSSM Debt Capacity Analysis.”

16. Is there a link between this change and budget strategies that will be introduced by the CE to make up for a possible Ambulance Fee elimination?

No, there is no link between this change and budget strategies re: the possible Ambulance Fee elimination.

DTS Exhibit A "PSSM Capital Cost + Debt Svc. Change"

Public Safety System Modernization Summary - Capital Cost and Debt Service Cost Changes										
Schedule 1 PSSM Capital Costs	Total	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Beyond FY18
Total Project										
PDF Revised per Supplemental Six Year	54,863	24,050	12,670	13,240	4,903					
PDF Approved Budget Six Year	51,820	2,434	14,124	19,344	9,871	6,047				
Increase/(Decrease) in Capital Cost	3,043	21,616	(1,454)	(6,104)	(4,968)	(6,047)				
Radios Only										
Radios Revised per Supplemental Six Year	26,333	23,000			3,333					
Radios Approved Budget Six Year	23,290	1,384	1,454	6,104	8,301	6,047				
Increase/(Decrease) in Capital Cost	3,043	21,616	(1,454)	(6,104)	(4,968)	(6,047)				
Schedule 2 PSSM Debt Service Costs										
Radios Only*										
Proposed Debt Service	30,154	-	2,637	5,274	5,274	5,652	6,031	3,394	757	1,135
Approved Budget Debt Service **	25,369	-	502	1,030	3,247	5,758	7,426	5,210	2,196	-
Increase/(Decrease) in Debt Service Cost	4,785	-	2,135	4,244	2,027	(106)	(1,395)	(1,816)	(1,439)	1,135
Less \$3.3 mn Payment in Lieu of Rebanding	(3,300)	-	(2,135)	(1,165)	-	-	-	-	-	-
Net increase (decrease) in Debt Service	1,485	-	-	3,079	2,027	(106)	(1,395)	(1,816)	(1,439)	1,135
Proposed Debt Service less \$3.3mn PILR	26,854		502	4,109	5,274	5,652	6,031	3,394	757	1,135

NOTE

*Note: Debt Service in this analysis only factors in debt service on financed radios; the Approved Debt Service schedule for this project finances radios plus other items.

** Note: Approved Debt Service budget did not include amounts subsequent to FY16

APPROVED

DB Exhibit B Radio subscriber units

Approved CIP radio purchase schedule

	Total	FY11	FY12	FY13	FY14	FY15	FY16
<i>Portable Radios</i>							
Montgomery County Police	956	123	150	663	20	-	-
Montgomery County FRS	1,119	123	151	823	22	-	-
Sheriff	147	-	-	-	147	-	-
DOCR	152	-	-	-	-	152	-
Park Police	273	100	23	-	-	150	-
DOT	343	-	-	-	-	343	-
Homeland Security	10	-	-	-	-	10	-
Security	24	-	-	-	-	24	-
Other	153	-	-	-	-	153	-
Sub-total Portable Radios	3,177	346	324	1,486	189	832	-
<i>Mobile radios</i>							
Montgomery County Police	1,745	-	-	-	1,376	369	-
Montgomery County FRS	437	-	-	-	437	-	-
Sheriff	73	-	-	-	73	-	-
DOCR	9	-	-	-	-	9	-
Park Police	80	-	40	40	-	-	-
DOT	312	-	-	-	-	312	-
Security	2	-	-	-	-	2	-
Other	40	-	-	-	-	40	-
Sub-total Portable Radios	2,698	-	40	40	1,886	732	-
FY11-16 CIP Approved radio purchase schedule	5,875	346	364	1,526	2,075	1,564	-

\$3.3 million is for 4186 portable + mobile radios



PROPOSED

DTS

Exhibit B Radio Subscriber units

Pg 2 of 2

Proposed CIP radio purchase schedule

	Total	FY11	FY12	FY13	FY14	FY15	FY16
<i>Portable Radios</i>							
Montgomery County Police	956	956	-	-	-	-	-
Montgomery county FRS	1,119	1,119	-	-	-	-	-
Sheriff	147	147	-	-	-	-	-
DOCR	152	-	-	-	152	-	-
Park Police	273	123	-	-	150	-	-
DOT	343	-	-	-	343	-	-
Homeland Security	10	-	-	-	10	-	-
Security	24	-	-	-	24	-	-
Other	153	-	-	-	153	-	-
Sub-total Portable Radios	3,177	2,345	-	-	832	-	-
<i>Mobile radios</i>							
Montgomery County Police	1,745	1,745	-	-	-	-	-
Montgomery county FRS	437	437	-	-	-	-	-
Sheriff	73	73	-	-	-	-	-
DOCR	9	-	-	-	9	-	-
Park Police	80	80	-	-	-	-	-
DOT	312	-	-	-	312	-	-
Security	2	-	-	-	2	-	-
Other	40	-	-	-	40	-	-
Sub-total Mobile Radios	2,698	2,335	-	-	363	-	-
FY11-16 CIP Proposed radio purchase schedule	5,875	4,389	-	-	1,486	-	-

(=)

DTB Exhibit C PSM Summary of Cost Avoidance

Summary of Cost Avoidance

COST AVOIDANCE - THIRD TOUCH - POST REBANDING

	\$
1 Radio Installation (Note a)	
Cost for "third touch" radio installation	1,974,000
2 Public Safety Staff and Vehicle Impacts (note b)	
(times for radio exchanges, delivery of vehicles for replacement, verification of inventory information	664,950
3 Maintenance Warranty	253,000
(not required as new equipment warranty delay need to purchase maintenance warranty for a few years)	
4 Installation Accessories	425,000
(avoid replacement of wiring harnesses)	
Estimated Cost Avoidance	<u><u>3,316,950</u></u>
Add loss of PILR Funds	3,300,000
Total "Cost"/Loss	<u><u>6,616,950</u></u>

Notes

- a Estimates on install time and hourly rate based on current contract costs
(approx 1977 mobile radios@11 hours/radio@\$89)

- b. 4450 radios@ 3hours@\$35/hour - Payroll Cost 467,250
1977 mobile radios@ \$100 197,700
(vehicle fuel and out of service time impacts)

- c. **Acquisition of Model 5000 radios will require replacement within 3-4 years at cost of approximately \$24 million**

DTS EXHIBIT D - Debt Capacity Analysis

DEBT CAPACITY ANALYSIS

FY11-16 Biennial CAPITAL IMPROVEMENTS PROGRAM

DEBT CAPACITY ANALYSIS PSSM supplemental; Sprint payment applied to Debt Service

Scenario - Debt Issues @ \$325mn/year (SAG) - Updated

6 Yr. Total (\$Mn.) \$1,950.0 mn

FY11 Total (\$Mn.) \$325.0 mn

FY12 Total (\$Mn.) \$325.0 mn

	GUIDELINE	FY10	FY11	FY12	FY13	FY14	FY15	FY16
1. New GO Debt Issued (\$000s) (Scenarios)		310,000	325,000	325,000	325,000	325,000	325,000	325,000
FYs 11-16 Approved Issues (\$000)		310,000	325,000	325,000	325,000	325,000	325,000	325,000
2. GO Debt/Assessed Value	1.5%	1.24%	1.40%	1.46%	1.47%	1.47%	1.44%	1.39%
3. Debt Service + LTL + Short-Term Leases/Revenues (GF)		8.75%	9.29%	10.11%	11.31%	11.79%	11.86%	11.83%
4. \$ Debt/Capita		2,239	2,498	2,639	2,762	2,872	2,969	3,058
5. \$ Real Debt/Capita	\$1,800	2,239	2,446	2,528	2,583	2,617	2,632	2,632
6. Capita Debt/Capita Income	3.5%	3.11%	3.49%	3.56%	3.57%	3.55%	3.53%	3.53%
7. Payout Ratio	60% - 75%	69.56%	68.59%	68.12%	67.91%	67.95%	68.17%	68.47%
8. Total Debt Outstanding (\$000s)		2,163,274	2,442,635	2,610,455	2,765,125	2,909,660	3,042,940	3,164,765
9. Real Debt Outstanding (\$000)		2,163,274	2,392,395	2,500,502	2,585,317	2,651,514	2,697,441	2,723,722
10. OP/PSP Growth Assumption			-0.7%	2.9%	0.5%	3.6%	4.7%	4.1%

(1) This analysis is used to determine the capacity of Montgomery County to pay debt service on long-term GO Bond debt, long-term leases, and substantial short-term financing.

(2) OP/PSP Growth Assumption equals change in revenues from FY11 approved budget to FY12 budget for FY12 and budget to budget for FY13-16.

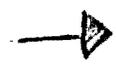
Updates since the May Approved

1. Update debt service for the PSSM supplemental

Comparison: May Approved to PSSM supplemental

Debt Service + LTL + Short-Term Leases/Revenues (GF)

May Approved			9.29%	10.11%	11.21%	11.73%	11.86%	11.87%
PSSM Supplemental			9.29%	10.11%	11.31%	11.79%	11.86%	11.83%
Change			0.00%	0.00%	0.10%	0.06%	0.00%	-0.04%



APPROVED CIP

EXPENDITURE SCHEDULE

Project Name:		Public Safety System Modernization 340901								
	Total	Thru FY09	Est FY10	6 Years	FY11	FY12	FY13	FY14	FY15	FY16
Planning, Design, Super.:										
Radio Infrastructure Ping	\$ 1,701	\$ -	\$ -	\$ 1,701	\$ 300	\$ 450	\$ 450	\$ 501	\$ -	\$ -
CAD Planning	\$ 1,340	\$ -	\$ -	\$ 1,340	\$ 550	\$ 420	\$ 370	\$ -	\$ -	\$ -
Station Alerting Planning	\$ 225	\$ -	\$ -	\$ 225	\$ 75	\$ 75	\$ 75	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Planning, Design,	\$ 3,266	\$ -	\$ -	\$ 3,266	\$ 925	\$ 945	\$ 895	\$ 501	\$ -	\$ -
Construction:										
Radio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CAD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Station Alerting	\$ 3,264	\$ -	\$ -	\$ 3,264	\$ 125	\$ 725	\$ 1,345	\$ 1,069	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Construction	\$ 3,264	\$ -	\$ -	\$ 3,264	\$ 125	\$ 725	\$ 1,345	\$ 1,069	\$ -	\$ -
Other:										
Radios	\$ 26,333	\$ 2,947	\$ 96	\$ 23,290	\$ 1,384	\$ 1,454	\$ 6,104	\$ 8,301	\$ 6,047	\$ -
CAD - procurement	\$ 18,000	\$ -	\$ -	\$ 18,000	\$ -	\$ 9,000	\$ 9,000	\$ -	\$ -	\$ -
CAD - deployment	\$ 4,000	\$ -	\$ -	\$ 4,000	\$ -	\$ 2,000	\$ 2,000	\$ -	\$ -	\$ -
Subtotal CAD	\$ 22,000	\$ -	\$ -	\$ 22,000	\$ -	\$ 11,000	\$ 11,000	\$ -	\$ -	\$ -
Station Alerting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other	\$ 48,333	\$ 2,947	\$ 96	\$ 45,290	\$ 1,384	\$ 12,454	\$ 17,104	\$ 8,301	\$ 6,047	\$ -
TOTAL PROJECT	\$ 54,863	\$ 2,947	\$ 96	\$ 51,820	\$ 2,434	\$ 14,124	\$ 19,344	\$ 9,871	\$ 6,047	\$ -
Number of radios:				5,875	346	364	1,526	2,075	1,564	0

71

Project Name:		Public Safety System Modernization 340901 Revised for Supplemental								
	Total	Thru FY09	Est FY10	6 Years	FY11	FY12	FY13	FY14	FY15	FY16
Planning, Design, Super.:										
Radio Infrastructure Plng	\$ 1,701	\$ -	\$ -	\$ 1,701	\$ 300	\$ 450	\$ 450	\$ 501	\$ -	\$ -
CAD Planning	\$ 1,340	\$ -	\$ -	\$ 1,340	\$ 550	\$ 420	\$ 370	\$ -	\$ -	\$ -
Station Alerting Planning	\$ 225	\$ -	\$ -	\$ 225	\$ 75	\$ 75	\$ 75	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Planning, Design,	\$ 3,266	\$ -	\$ -	\$ 3,266	\$ 925	\$ 945	\$ 895	\$ 501	\$ -	\$ -
Construction:										
Radio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CAD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Station Alerting	\$ 3,264	\$ -	\$ -	\$ 3,264	\$ 125	\$ 725	\$ 1,345	\$ 1,069	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Construction	\$ 3,264	\$ -	\$ -	\$ 3,264	\$ 125	\$ 725	\$ 1,345	\$ 1,069	\$ -	\$ -
Other:										
Radios - Pub. Safety (revised)	\$ 29,376	\$ 2,947	\$ 96	\$ 26,333	\$ 23,000	\$ -	\$ -	\$ 3,333	\$ -	\$ -
CAD - procurement	\$ 18,000	\$ -	\$ -	\$ 18,000	\$ -	\$ 9,000	\$ 9,000	\$ -	\$ -	\$ -
CAD - deployment	\$ 4,000	\$ -	\$ -	\$ 4,000	\$ -	\$ 2,000	\$ 2,000	\$ -	\$ -	\$ -
Subtotal CAD	\$ 22,000	\$ -	\$ -	\$ 22,000	\$ -	\$ 11,000	\$ 11,000	\$ -	\$ -	\$ -
Station Alerting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other	\$ 51,376	\$ 2,947	\$ 96	\$ 48,333	\$ 23,000	\$ 11,000	\$ 11,000	\$ 3,333	\$ -	\$ -
TOTAL PDF	\$ 57,906	\$ 2,947	\$ 96	\$ 54,863	\$ 24,050	\$ 12,670	\$ 13,240	\$ 4,903	\$ -	\$ -
Total Radio Accountability	6635	736	24		4389			1486		
NOTES:										
760	Model XTS5000 Portable Radios purchased with Grant Funds for MCFRS and Police and will be redistributed to Non-Public Safety Users.									
4389	Models XTS/XTL 7000 Portables and Mobiles Radios to be distributed to Public Safety Users Only									
1486	Models P-25 compatible radios to replace the remaining non-public safety radio fleet									
Total	6635	Average estimated price per radio - XTS5000 = \$4000 (Public Safety) XTS/XTL7000 = \$5300 (Public Safety - note: price includes required new accessories such as speaker mikes, extra battery and gang chargers) P-25 Models = \$2300 (Non-Public Safety)								

51

Approved 6/29/2010

Attachment to Resolution No.: 16-1416

County Council's Approved FY11-16 Public Services Program
Tax Supported Fiscal Plan Summary

(\$ in millions)

	App. FY10	Restated FY10	% Chg. FY10-11	App. FY11	% Chg. FY11-12	Projected FY12	% Chg. FY12-13	Projected FY13	% Chg. FY13-14	Projected FY14	% Chg. FY14-15	Projected FY15	% Chg. FY15-16	Projected FY16
Total Revenues	5,210.9			5,271.0										
			Restated to approved											
1 Property Tax (less PDs)	1,440.9	1,440.9	0.8%	1,450.1	2.7%	1,489.9	3.0%	1,534.9	3.1%	1,582.9	3.4%	1,635.9	2.4%	1,675.3
2 Income Tax	1,214.8	1,214.8	-12.7%	1,060.7	8.8%	1,130.2	6.2%	1,200.8	5.3%	1,264.3	6.6%	1,373.6	7.9%	1,462.8
3 Transfer/Record. Tax	123.4	123.4	13.4%	139.9	6.0%	148.3	-2.2%	145.1	8.7%	157.8	7.5%	169.7	5.1%	178.3
4 Investment Income	5.9	5.9	-38.2%	3.8	88.3%	6.9	95.1%	13.4	28.0%	17.1	16.8%	20.0	6.8%	21.7
5 Other Taxes	185.3	185.3	69.0%	313.2	2.6%	322.1	-32.6%	216.4	2.9%	222.6	2.8%	228.9	2.7%	235.1
6 Other Revenues	834.8	755.1	7.5%	811.6	-2.5%	791.7	0.7%	797.2	0.7%	809.1	0.8%	809.6	0.9%	816.8
7 Total Revenues	3,804.9	3,726.4	1.4%	3,779.2	2.8%	3,889.1	0.6%	3,907.8	3.5%	4,048.0	4.7%	4,237.6	4.1%	4,409.6
8														
9 Net Transfers In (Out)	37.2	37.2	12.1%	41.7	-68.0%	13.4	2.4%	13.7	2.6%	14.0	2.8%	14.4	3.0%	14.9
10 Total Revenue and Transfers Available	3,842.2	3,762.6	1.6%	3,821.0	2.1%	3,902.4	0.5%	3,921.4	3.6%	4,062.0	4.7%	4,262.0	4.1%	4,424.4
11														
12 Non-Operating Budget Use of Revenues				3,821.0		3,902.4		3,921.4		4,062.0		4,252.0		4,424.4
13 Debt Service	251.5	251.5	5.0%	284.0	11.9%	295.3	11.3%	328.8	8.3%	356.1	8.3%	378.5	4.6%	396.1
14 PAYGO	1.3	1.3	-100.0%	-	n/a	32.5	0.0%	32.5	0.0%	32.5	0.0%	32.5	0.0%	32.5
15 CIP Current Revenue	30.7	30.7	-22.8%	23.8	72.1%	40.9	40.3%	57.4	41.0%	81.0	3.9%	84.2	-24.7%	63.4
16 Montgomery College Reserves						4.0	-98.1%	0.1	-2.9%	0.1	5.5%	0.1	4.2%	0.1
17 MNCPPC Reserves						4.3	-98.3%	0.2	-2.6%	0.2	7.1%	0.2	-25.9%	0.1
18 Contribution to General Fund Undesignated Reserves	(39.3)	(39.3)	-372.3%	107.1	-100.4%	(0.4)	1300.2%	5.4	-119.9%	(1.1)	668.3%	6.1	38.3%	8.5
19 Contribution to Revenue Stabilization Reserves	-	-	n/a	33.9	-28.5%	24.3	-16.0%	20.4	16.4%	23.7	44.9%	34.4	-6.3%	32.2
20 Retiree Health Insurance Pre-Funding	-	-	n/a	-	n/a	83.8	22.7%	102.8	16.6%	121.7	14.9%	139.8	5.0%	146.8
21 Set Aside for other uses (supplemental appropriations)	2.5	2.5	-80.2%	0.3	8916.1%	22.5	0.0%	22.5	0.0%	22.5	-11.3%	20.0	0.0%	20.0
22 Total Other Uses of Resources	246.7	246.7	73.9%	429.1	18.2%	507.6	12.4%	559.7	11.7%	636.6	9.3%	695.6	0.6%	699.6
23 Available to Allocate to Agencies (Total Revenues + Net Transfers - Total Other Uses)	3,595.4	3,515.9	-3.6%	3,391.8	0.1%	3,395.4	-1.3%	3,351.7	2.2%	3,426.4	3.8%	3,556.4	4.7%	3,724.9
24														
31 Agency Uses	3,595.4	3,515.9	-3.6%	3,391.8	0.1%	3,395.4	-1.3%	3,351.7	2.2%	3,426.4	3.8%	3,556.4	4.7%	3,724.9
32 Total Uses	3,842.2	3,762.6	1.6%	3,821.0	2.1%	3,902.4	0.5%	3,921.4	3.6%	4,062.0	4.7%	4,262.0	4.1%	4,424.4
33 (Gap)/Available		0.0		0.0		0.0		0.0		0.0		0.0		0.0

↑
FY13
\$3,019m

↑
FY14
\$2,027m

16

Approved 6/29/2010

	App. FY10	Restated FY10	% Chg. FY10-11	App. FY11	% Chg. FY11-12	Projected FY12	% Chg. FY12-13	Projected FY13	% Chg. FY13-14	Projected FY14	% Chg. FY14-15	Projected FY15	% Chg. FY15-16	Projected FY16
34 Beginning Reserves														
35 Unrestricted General Fund	115.5	115.5	-74.3%	29.7	350.6%	138.8	-0.3%	136.4	3.9%	141.8	-0.8%	140.7	4.3%	146.8
36 Revenue Stabilization Fund	119.6	119.6	-49.6%	60.4	58.2%	94.3	25.7%	116.8	17.2%	139.0	17.1%	162.7	21.1%	187.1
37 Total Beginning Reserves	235.2	235.2	-61.7%	90.1	158.8%	231.2	10.3%	255.0	10.1%	280.7	8.1%	303.4	13.3%	343.9
38														
39 Additions to Reserves														
40 Unrestricted General Fund	-39.3	-39.3	-372.3%	107.1	-100.4%	-0.4	1300.2%	5.4	-119.9%	-1.1	668.3%	6.1	39.3%	6.5
41 Revenue Stabilization Fund	0.0	0.0	n/a	33.9	-28.6%	24.3	-16.0%	20.4	16.4%	23.7	44.9%	34.4	-6.3%	32.2
42 Total Change in Reserves	-39.3	-39.3	-458.6%	141.1	-83.1%	23.8	8.2%	25.8	-12.1%	22.6	78.6%	40.5	0.5%	40.7
43														
44 Ending Reserves														
45 Unrestricted General Fund	76.2	76.2	79.6%	136.8	-0.3%	136.4	3.9%	141.8	-0.8%	140.7	4.3%	146.8	5.6%	155.3
46 Revenue Stabilization Fund	119.6	119.6	-21.2%	64.3	25.7%	118.6	17.2%	139.0	17.1%	162.7	21.1%	187.1	16.3%	228.2
47 Total Ending Reserves	195.8	195.8	18.0%	231.2	10.3%	255.0	10.1%	280.7	8.1%	303.4	13.3%	343.9	11.8%	384.5
48 Reserves as a % of Adjusted Governmental Revenues				6.0%		6.6%		7.1%		7.4%		8.0%		8.6%
49 Agency Reserves														
50 Montgomery College				0.0	n/a	4.0	1.9%	4.0	1.8%	4.1	1.8%	4.2	1.9%	4.3
51 MNCPPC				0.0	n/a	4.3	3.7%	4.5	3.5%	4.6	3.6%	4.8	2.6%	4.9
52 Retiree Health Insurance Pre-Funding														
53 Montgomery County Public Schools (MCPS)						53.2		64.8		76.4		87.7		92.1
54 Montgomery College (MC)						1.0		1.2		1.3		1.4		1.5
55 MNCPPC (w/o Debt Service)						4.4		5.1		5.8		6.1		6.4
56 MCG						25.0		31.5		38.4		44.8		46.8
57 Subtotal Retiree Health Insurance Pre-Funding						83.8		102.6		121.7		139.6		146.8

This fiscal plan summary reflects the following assumptions:

1. FY12-16 property tax revenues are at the Charter Limit assuming a tax credit. All other tax revenues at current rates except as noted below.
2. Revenues reflect Energy Tax and Wireless Telephone Tax increases approved by the County Council on May 27, 2010. Energy Tax increase sunsets at the end of FY12.
3. PAYGO restored to policy level of 10% of planned GO Bond borrowing in FY12-16. See Row 14 above.
4. FY11 revenues reflect one-year redirection of Recordation Tax Premium (\$8 M.) and Recordation Tax for MCPS CIP and College IT (\$5 M.).
5. Retiree Health Insurance Pre-Funding assumed to resume at scheduled contribution levels in FY12. See Rows 20 and 53-56 above.
6. Projected FY12-16 rate of growth of Agency Uses constrained to balance the fiscal plan in FY12-16. Allocations to the four agencies (MCPS, Montgomery College, MNCPPC, and County Government) will be determined in the annual budget process.
7. FY11 reserves reflect restoration of reserves to current 6% (of tax supported resources) policy level. FY10 and FY11 reserves (see Rows 34-48 above) include all County and Outside Agency tax supported reserves.
8. FY12-16 Unrestricted General Fund Reserves are reduced in certain years to reflect compliance with Section 310 of the County Charter on maximum size of the general fund balance (shall not exceed 5% of prior year general fund revenues). Outside Agency reserves are excluded from these amounts and are displayed separately (see Rows 16 - 17 and 50 - 51 above).
9. FY12-16 reserves reflect proposed new reserve policy including increase in reserve levels and inclusion of capital projects and grant revenues as part of Adjusted Governmental Revenues.

Notes:

1. Restated FY10 excludes \$79.5 million for debt service that was double appropriated to MCPS to meet the State's Maintenance of Effort requirement and then reimbursed to the County.
2. As of 6-22-10, Actual FY10 agency uses are estimated to be \$103.0 million less than Approved or Restated FY10 due chiefly to reductions from two FY10 savings plans.

5



OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

September 29, 2010

TO: Nancy Floreen, President, County Council

FROM: Isiah Leggett, County Executive *Isiah Leggett*

SUBJECT: Amendment to the FY11-16 Capital Improvements Program and Supplemental Appropriation #5-S11-CMCG-1 to the FY11 Capital Budget
Montgomery County Government
Department of Technology Services
Public Safety System Modernization (No. 340901), \$21,616,000.

RECEIVED
MONTGOMERY COUNTY
COUNCIL
2010 SEP 29 PM 3:30

I am recommending an amendment to the FY11-16 Capital Improvements Program and supplemental appropriation to the FY11 Capital Budget in the amount of \$21,616,000 for Public Safety System Modernization (No. 340901). Appropriation for this project will accelerate the purchase of new radios to support Public Safety communications interoperability Countywide as well as meet the Federal Communications Commission (FCC) mandated 800 MHz frequency rebanding requirements for nationwide public safety radio frequency interoperability. This supplemental appropriation (\$21.616M) and increased funding (\$3.043 M) is needed to take advantage of a "Partial Payment in Lieu of Re-Banding" (PILR) offer from Sprint/Nextel toward the financing of new, upgraded, P25-compliant public safety radios. The PILR response deadline is November 5, 2010.

The FCC has set timelines for moving all Public Safety radio operations to the alternative frequencies identified and licensed in the current 800 MHz band. This "re-banding", to ensure that there is no frequency overlap between commercial and Public Safety broadcasts, must be complete by the end of 2011. Sprint/Nextel, through its contracted Transition Administrator, and working with Motorola, its technical partner, created a plan which proposed "loaner" radios so that Montgomery County could re-program existing radios for use in the alternative frequencies. Further evaluation revealed that the loaner program presents significant operational challenges. The program would require the installation of loaner mobile radios in vehicles and subsequent re-installation of the original re-programmed radios after the frequency switch was made. Further, a third replacement would occur when the County acquired the new radios approved in the CIP.

As an alternative, the Transition Administrator and Sprint/Nextel offered the County a PILR option which would require accelerating the purchase of new public safety radios planned to be completed over the next four years, to FY11 and provide \$3.3M toward the County's radio replacement plan. The amount offered was derived from an analysis of the costs that the loaner program was to cost Sprint/Nextel.

18 1

Nancy Floreen, President, County Council
September 29, 2010
Page 2

Acceptance of the PILR plan will accelerate implementation of the radio project within the CIP, reduce post re-banding operational costs, and allow the County to take advantage of the \$3.3 million PILR funding from Sprint/Nextel. While an additional appropriation is required for this project, this is offset by the additional PILR funding of \$3.3 million noted above as well as a reduction in future operating costs of an estimated minimum of \$3 million in maintenance contracts and County labor costs to complete the original "loaner" program for total savings of over \$6.3 million.

This request supports a significant upgrade in the type of public safety radio to be purchased from the previously planned Model 5000 to Motorola's APX7000 model. The APX7000 models will have a longer useful life than the Model 5000, provide multi-band interoperability, comply with P-25 standards and offer up-to-date "next generation" options. It should also be noted that acquisition of the Model 5000 radio would have required replacement of these radios within 3-4 years at a cost of another approximately \$24 million.

The recommended amendment is consistent with the criteria for amending the CIP because it will leverage a significant non-County source of funds and offers a significant opportunity which will be lost if not taken at this time. In order to minimize the fiscal impact of accelerating the debt-financed radio purchases, I recommend that the PILR be used to offset increased debt service costs in FY12 and FY13.

I recommend that the County Council approve this supplemental appropriation and amendment to the FY11-16 Capital Improvements Program in the amount of \$21,616,000 and specify the source of funds as Short-Term Financing.

I appreciate your prompt consideration of this action.

IL: jdc

Attachment: Amendment to the FY11-16 Capital Improvements Program and
Supplemental Appropriation #5-S11-CMCG-1

c: Kathleen Boucher, Assistant Chief Administrative Office, Offices of the County Executive
Steven Emanuel, Director, Department of Technology Services
Joseph Beach, Director, Office of Management and Budget
Jacqueline Carter, CIP Coordinator, Office of Management and Budget
John Cuff, Management and Budget Specialist, Office of Management and Budget
Jennifer Barrett, Director, Department of Finance

(19) (2)

Resolution No: _____
Introduced: _____
Adopted: _____

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Council President at the Request of the County Executive

SUBJECT: Amendment to the FY11-16 Capital Improvements Program and
Supplemental Appropriation #5-S11-CMCG-1 to the FY11 Capital Budget
Montgomery County Government
Department of Technology Services
Public Safety System Modernization (No. 340901), \$21,616,000

Background

1. Section 307 of the Montgomery County Charter provides that any supplemental appropriation shall be recommended by the County Executive who shall specify the source of funds to finance it. The Council shall hold a public hearing on each proposed supplemental appropriation after at least one week's notice. A supplemental appropriation that would comply with, avail the County of, or put into effect a grant or a Federal, State or County law or regulation, or one that is approved after January 1 of any fiscal year, requires an affirmative vote of five Councilmembers. A supplemental appropriation for any other purpose that is approved before January 1 of any fiscal year requires an affirmative vote of six Councilmembers. The Council may, in a single action, approve more than one supplemental appropriation. The Executive may disapprove or reduce a supplemental appropriation, and the Council may reapprove the appropriation, as if it were an item in the annual budget.
2. Section 302 of the Montgomery County Charter provides that the Council may amend an approved capital improvements program at any time by an affirmative vote of no fewer than six members of the Council.
3. The County Executive recommends the following capital project appropriation increases:

<u>Project Name</u>	<u>Project Number</u>	<u>Cost Element</u>	<u>Amount</u>	<u>Source of Funds</u>
Public Safety System Modernization	340901	Other	\$21,616,000	Short-Term Financing

TOTAL \$21,616,000

20 3

Amendment to the FY11-16 Capital Improvements Program and Supplemental Appropriation
#5-S11-CMCG-1

Page Two

4. This increase is needed to take advantage of a "Partial Payment in Lieu of Re-Banding" (PILR) offer from Sprint/Nextel toward the financing of new, upgraded, P25-compliant public safety radios. As an alternative to the currently planned "loaner" radio program, the PILR option would require accelerating the purchase of new public safety radios planned to be completed over the next four years, to FY11 and provide \$3.3M toward the County's radio replacement plan. In order to minimize the fiscal impact of accelerating the debt-financed radio purchases, it is recommended that the PILR be used to offset increased debt service costs in FY12 and FY13.
5. Acceptance of the PILR plan will accelerate implementation of the radio project within the CIP, reduce post re-banding operational costs, and allow the County to take advantage of the \$3.3 million PILR funding from Sprint/Nextel. While an additional appropriation is required for this project, this is offset by the additional PILR funding of \$3.3 million noted above as well as a reduction in future operating costs of an estimated minimum of \$3 million in maintenance contracts and County labor costs to complete the original "loaner" program for total savings of over \$6.3 million.
6. This request supports a significant upgrade in the type of public safety radio to be purchased from the previously planned Model 5000 to Motorola's APX7000 model. The APX7000 models will have a longer useful life than the Model 5000, provide multi-band interoperability, comply with P-25 standards and offer up-to-date "next generation" options. It should also be noted that acquisition of the Model 5000 radio would have required replacement of these radios within 3-4 years at a cost of another approximately \$24 million.
7. The recommended amendment is consistent with the criteria for amending the CIP because it will leverage a significant non-County source of funds and offers a significant opportunity which will be lost if not taken at this time
8. The County Executive recommends an amendment to the FY11-16 Capital Improvements Program and a supplemental appropriation in the amount of \$21,616,000 for Public Safety System Modernization (No. 340901), and specifies that the source of funds will be Short-Term Financing.
9. Notice of public hearing was given and a public hearing was held.

Action

The County Council for Montgomery County, Maryland, approves the following action:

1. The FY11-16 Capital Improvements Program of the Montgomery County Government is amended as reflected on the attached project description form and a supplemental appropriation is approved as follows:

(21) (4)

<u>Project Name</u>	<u>Project Number</u>	<u>Cost Element</u>	<u>Amount</u>	<u>Source of Funds</u>
Public Safety System Modernization	340901	Other	\$21,616,000	Short-Term Financing
TOTAL			\$21,616,000	

Amendment to the FY11-16 Capital Improvements Program and Supplemental Appropriation
#5-S11-CMCG-1
Page Three

This is a correct copy of Council action.

Linda M. Lauer, Clerk of the Council

22 5

Public Safety System Modernization -- No. 340901

Category
Subcategory
Administering Agency
Planning Area

General Government
County Offices and Other Improvements
County Executive
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

September 28, 2010
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	3,266	0	0	3,266	925	945	895	501	0	0	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	3,264	0	0	3,264	125	725	1,345	1,069	0	0	0
Other	51,376	2,947	96	48,333	23,000	11,000	11,000	3,333	0	0	0
Total	57,906	2,947	96	54,863	24,050	12,670	13,240	4,903	0	0	0

FUNDING SCHEDULE (\$000)

Federal Aid	3,343	2,947	96	300	300	0	0	0	0	0	0
G.O. Bonds	3,840	0	0	3,840	200	800	1,420	1,420	0	0	0
Short-Term Financing	50,723	0	0	50,723	23,550	11,870	11,820	3,483	0	0	0
Total	57,906	2,947	96	54,863	24,050	12,670	13,240	4,903	0	0	0

OPERATING BUDGET IMPACT (\$000)

Maintenance				2,408	48	0	680	500	680	500
Net Impact				2,408	48	0	680	500	680	500

DESCRIPTION

This project will provide for phased upgrades and modernization of computer aided dispatch (CAD) and voice radio systems used primarily by the County's public safety first responder agencies including Police, Fire and Rescue, Sheriff, Corrections and Rehabilitation and Emergency Management and Homeland Security. The modernization will include replacement of the current CAD system, replacement of mobile and portable radios, and voice radio communications infrastructure. The initial phase includes the CAD replacement, station alerting system replacement and the acquisition of the P-25 standard radio devices. A subsequent phase would include the replacement of the radio infrastructure, estimated at approximately \$50M. The current project includes \$1.7M for planning and design of the radio infrastructure replacement.

The previously approved Fire Station Alerting System Upgrades project (#451000) was transferred to this project in order to coordinate the upgrades with the new CAD system. The alerting system upgrades will modernize the fire station alerting systems at 32 existing stations, maintaining the ability to notify fire and rescue stations of emergencies. The alerting system, including audible and data signals, is essential for the notification of an emergency and the dispatch of appropriate response units from the county.

As voice, data and video are beginning to converge to a single platform, this project will provide a pathway to a modern public safety support infrastructure that will enable the County to leverage technology advances and provides efficient and reliable systems for first responders. This project will follow the methodologies and strategies presented in the Public Safety Systems Modernization (PSSM) plan completed in July 2009.

COST CHANGE

Increase is due to upgrading from the type of Public Safety radios to be purchased from the previously planned Model 5000 to Motorola's APX 7000 Model. The APX7000 models will have longer useful lives than the Model 5000, provide multi-band interoperability, comply with P-25 standards and offer up-to-date "next generation" options. The implementation schedule for the purchase of new public safety radios planned to be completed over FY11-14 has been accelerated to FY11 in order to take advantage of a "Partial Payment in Lieu of Rebanding" proposal from Sprint/Nextel.

JUSTIFICATION

The Public Safety Systems require modernization. The CAD system is reaching the end of useful life and does not meet the County's current operational requirements, impacting the response time of first responders to 9-1-1 calls. The CAD Roadmap Study, completed in March 2009, recommended replacement of the system to address existing shortcomings and prepare for the next generation 9-1-1 systems. Manufacturer's support for the voice radio system has begun to be phased out December 31, 2009. Beyond that date the manufacturer will only continue to provide system support on an "as available" basis, but will not guarantee the availability of parts or technical resources.

The CAD modernization will initiate with a detailed planning phase that will include the use of industry experts to assist in both business process analysis and developing detailed business and technical requirements for the new CAD system. Utilizing external consultants for this process will allow the County to incorporate lessons learned and best practices from other jurisdictions.

As more of the County's regional partners migrate to newer voice technologies, it will affect interoperable voice communications. To ensure that the County

APPROPRIATION AND EXPENDITURE DATA	COORDINATION	MAP
Date First Appropriation	Public Safety Steering Group	
First Cost Estimate	Department of Technology Services	
Current Scope	Department of Police	
Last FY's Cost Estimate	Montgomery County Fire and Rescue Service	
Appropriation Request	Sheriff's Office	
Appropriation Request Est.	Department of Correction and Rehabilitation	
Supplemental Appropriation Request	Office of Emergency Management and Homeland Security	
Transfer	Department of Transportation	
Cumulative Appropriation	Department of Liquor Control	
Expenditures / Encumbrances	Montgomery County Public Schools (MCPS)	
Unencumbered Balance	Maryland-National Park and Planning Commission (M-NCPPC) Park Police	
Partial Closeout Thru	Washington Metropolitan Area Transit Authority (WMATA)	
New Partial Closeout		
Total Partial Closeout		

33
16

Public Safety System Modernization -- No. 340901 (continued)

maintains reliable and effective Public Safety (voice radio) communications for the operations of its first responders and to sustain communications interoperability for seamless mutual aid among its regional partners, the County needs to commence planning and implementation of a program to upgrade and modernize its portable and mobile radio units and subsequently the communications infrastructure. Acceleration of the public safety radio purchases and increased funding is needed to take advantage of a "Partial Payment in Lieu of Re-Banding" offer from Sprint/Nextel toward the financing of new, upgraded, P-25 compliant public safety radios. Upgrading from the Model 5000 to the APX 7000 Model and accelerating the purchase of the public safety radios will support Public Safety communications interoperability Countywide, as well as meet the Federal Communications Commission (FCC) mandated 800 MHz frequency rebanding requirements for nationwide public safety radio frequency interoperability. In addition, by accelerating the purchase of the public safety radios to FY11, the County will avoid the significant operational challenges of installing loaner radios and subsequent re-installation of the original re-programmed radios after the frequency modifications have been made. Further a third replacement would be required when the County acquired new radios.

The fire station alerting system upgrades were identified as a need under Section 5 of the MCFRS Master Plan (adopted by the County Council in October 2005) and detailed in the Station Alerting and Public Address (SA/PA) System for Fire/Rescue Stations, Rev 1, 2006. This project allows for the continuous and seamless functioning of the alerting systems within each fire station. A preliminary survey by DTS of existing conditions at all stations revealed system wide concerns, including inadequate spare parts inventory and lack of available maintenance support for alerting systems.

OTHER

CONDITIONS:

FY11 funds appropriated for this project must be used as follows: not more than:

- " \$300,000 for planning for public safety radio infrastructure replacement
- " \$550,000 for planning for CAD replacement
- " \$23,000 million for the purchase of P-25 compliant radios
- " \$75,000 for planning and \$125,000 for construction for station alerting

The CAD procurement request must reflect the County's interest in maintaining the station alerting functionality at the current level or better through the CAD system.

Funds appropriated for this project must not be used to purchase or implement the replacement CAD system or radio infrastructure until the Executive provides the Council with a detailed proposal and accurate cost estimates for the total project scope.

Funds for P-25 compliant radios in this project include funds to purchase a total of 203 radios to be used by the Park Police and 150 radios to be used by other M-NCPPC staff on a schedule agreed to by the County and M-NCPPC. Before the County may issue radios to Park Police or M-NCPPC staff, the County and M-NCPPC must sign a Memorandum of Understanding regarding the ownership, management, operation, and maintenance of the radios.

OTHER:

The RFP for the CAD replacement will include replacement of the following systems: CAD, mapping, and the existing Law Enforcement Records Management System (RMS), and Field Reporting Systems. In addition, replacement of the following systems will be considered for inclusion in the CAD replacement RFP: Fire Station Alerting, ProQA, False Alarm Reduction Section (FARS), Paging, and Fire House records management.

Coordination with participating departments/agencies and regional partners will continue throughout the project.

FISCAL NOTE

Funding in FY09 includes Urban Area Security Initiative (UASI) grant funding of \$2.055 million and Fire Act grant funding of \$988,000. Funding in FY11 includes Urban Area Security Initiative (UASI) grant funding of \$300,000.

Estimated costs for the elements to be funded in the current phase of the project are: CAD replacement \$23.340M; purchase of interoperable radios \$29.376M; Station Alerting system \$3.489M; planning for radio infrastructure replacement \$1.701M.

Public Safety System Modernization -- No. 340901

Category
Subcategory
Administering Agency
Planning Area

General Government
County Offices and Other Improvements
County Executive
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

May 25, 2010
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	3,266	0	0	3,266	925	945	895	501	0	0	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	3,264	0	0	3,264	125	725	1,345	1,069	0	0	0
Other	48,333	2,947	96	45,290	1,384	12,454	17,104	8,301	6,047	0	0
Total	54,863	2,947	96	51,820	2,434	14,124	19,344	9,871	6,047	0	0

FUNDING SCHEDULE (\$000)

Federal Aid	3,343	2,947	96	300	300	0	0	0	0	0	0
G.O. Bonds	3,840	0	0	3,840	200	800	1,420	1,420	0	0	0
Short-Term Financing	47,680	0	0	47,680	1,934	13,324	17,924	8,451	6,047	0	0
Total	54,863	2,947	96	51,820	2,434	14,124	19,344	9,871	6,047	0	0

OPERATING BUDGET IMPACT (\$000)

Maintenance				2,408	48	0	680	500	680	500
Net Impact				2,408	48	0	680	500	680	500

DESCRIPTION

This project will provide for phased upgrades and modernization of computer aided dispatch (CAD) and voice radio systems used primarily by the County's public safety first responder agencies including Police, Fire and Rescue, Sheriff, Corrections and Rehabilitation and Emergency Management and Homeland Security. The modernization will include replacement of the current CAD system, replacement of mobile and portable radios, and voice radio communications infrastructure. The initial phase includes the CAD replacement, station alerting system replacement and the acquisition of the P-25 standard radio devices. A subsequent phase would include the replacement of the radio infrastructure, estimated at approximately \$50M. The current project includes \$1.7M for planning and design of the radio infrastructure replacement.

The previously approved Fire Station Alerting System Upgrades project (#451000) was transferred to this project in order to coordinate the upgrades with the new CAD system. The alerting system upgrades will modernize the fire station alerting systems at 32 existing stations, maintaining the ability to notify fire and rescue stations of emergencies. The alerting system, including audible and data signals, is essential for the notification of an emergency and the dispatch of appropriate response units from the county.

As voice, data and video are beginning to converge to a single platform, this project will provide a pathway to a modern public safety support infrastructure that will enable the County to leverage technology advances and provides efficient and reliable systems for first responders. This project will follow the methodologies and strategies presented in the Public Safety Systems Modernization (PSSM) plan completed in July 2009.

COST CHANGE

Increase due to inclusion of additional upgrades and modernization of computer aided dispatch (CAD), replacement of mobile and portable radios, planning for replacement of voice radio infrastructure, addition of Fire Station Alerting project, and the addition of expenditures and funding for M-NCPPC radios.

JUSTIFICATION

The Public Safety Systems require modernization. The CAD system is reaching the end of useful life and does not meet the County's current operational requirements, impacting the response time of first responders to 9-1-1 calls. The CAD Roadmap Study, completed in March 2009, recommended replacement of the system to address existing shortcomings and prepare for the next generation 9-1-1 systems. Manufacturer's support for the voice radio system has begun to be phased out December 31, 2009. Beyond that date the manufacturer will only continue to provide system support on an "as available" basis, but will not guarantee the availability of parts or technical resources.

The CAD modernization will initiate with a detailed planning phase that will include the use of industry experts to assist in both business process analysis and developing detailed business and technical requirements for the new CAD system. Utilizing external consultants for this process will allow the County to incorporate lessons learned and best practices from other jurisdictions.

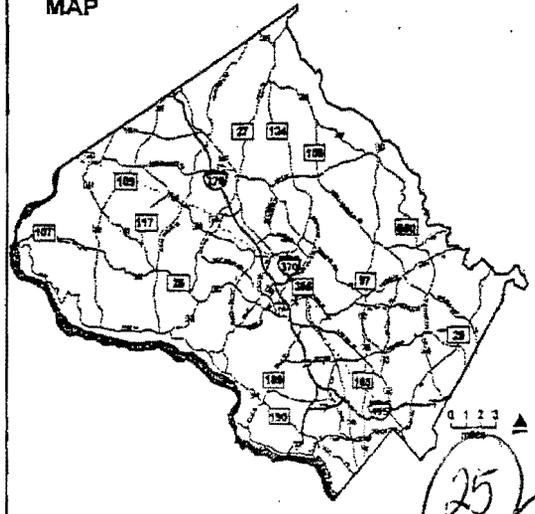
The fire station alerting system upgrades were identified as a need under Section 5 of the MCFRS Master Plan (adopted by the County Council in October 2005) and detailed in the Station Alerting and Public Address (SA/PA) System for Fire/Rescue Stations, Rev 1, 2006. This project allows for the continuous and

APPROPRIATION AND EXPENDITURE DATA		
Date First Appropriation	FY09	(\$000)
First Cost Estimate	FY11	54,863
Current Scope		
Last FY's Cost Estimate		6,883
Appropriation Request	FY11	2,434
Appropriation Request Est.	FY12	14,124
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		3,043
Expenditures / Encumbrances		2,947
Unencumbered Balance		96
Partial Closeout Thru	FY08	0
New Partial Closeout	FY09	0
Total Partial Closeout		0

COORDINATION

Public Safety Steering Group
Department of Technology Services
Department of Police
Montgomery County Fire and Rescue Service
Sheriff's Office
Department of Correction and Rehabilitation
Office of Emergency Management and Homeland Security
Department of Transportation
Department of Liquor Control
Montgomery County Public Schools (MCPS)
Maryland-National Park and Planning Commission (M-NCPPC) Park Police
Washington Metropolitan Area Transit Authority (WMATA)

MAP



25

Public Safety System Modernization -- No. 340901 (continued)

seamless functioning of the alerting systems within each fire station. A preliminary survey by DTS of existing conditions at all stations revealed system wide concerns, including inadequate spare parts inventory and lack of available maintenance support for alerting systems.

As more of the County's regional partners migrate to newer voice technologies, it will affect interoperable voice communications. To ensure that the County maintains reliable and effective Public Safety (voice radio) communications for the operations of its first responders and to sustain communications interoperability for seamless mutual aid among its regional partners, the County needs to commence planning and implementation of a program to upgrade and modernize its portable and mobile radio units and subsequently the communications infrastructure.

OTHER CONDITIONS:

FY11 funds appropriated for this project must be used as follows: not more than:

- \$300,000 for planning for public safety radio infrastructure replacement
- \$550,000 for planning for CAD replacement
- \$1.384 million for the purchase of P-25 compliant radios
- \$75,000 for planning and \$125,000 for construction for station alerting

The CAD procurement request must reflect the County's interest in maintaining the station alerting functionality at the current level or better through the CAD system.

Funds appropriated for this project must not be used to purchase or implement the replacement CAD system or radio infrastructure until the Executive provides the Council with a detailed proposal and accurate cost estimates for the total project scope.

Funds for P-25 compliant radios in this project include funds to purchase a total of 203 radios to be used by the Park Police and 150 radios to be used by other M-NCPPC staff on a schedule agreed to by the County and M-NCPPC. Before the County may issue radios to Park Police or M-NCPPC staff, the County and M-NCPPC must sign a Memorandum of Understanding regarding the ownership, management, operation, and maintenance of the radios.

OTHER:

The RFP for the CAD replacement will include replacement of the following systems: CAD, mapping, and the existing Law Enforcement Records Management System (RMS), and Field Reporting Systems. In addition, replacement of the following systems will be considered for inclusion in the CAD replacement RFP: Fire Station Alerting, ProQA, False Alarm Reduction Section (FARS), Paging, and Fire House records management.

Coordination with participating departments/agencies and regional partners will continue throughout the project.

FISCAL NOTE

Funding in FY09 includes Urban Area Security Initiative (UASI) grant funding of \$2.055 million and Fire Act grant funding of \$988,000. Funding in FY11 includes Urban Area Security Initiative (UASI) grant funding of \$300,000.

Estimated costs for the elements to be funded in the current phase of the project are: CAD replacement \$23.34M; purchase of interoperable radios \$25.3M; Station Alerting system \$3.489M; planning for radio infrastructure replacement \$1.7M.