

GO Committee #10  
April 20, 2015

Worksession

**MEMORANDUM**

April 16, 2015

TO: Government Operations and Fiscal Policy Committee

FROM: Dr. Costis Toregas, Council IT Adviser 

SUBJECT: Amendment to the FY15-20 Capital Improvements Program: Public Safety System Modernization (PSSM) in the amount of (\$75,000) - MCG (No. P340901)

Expected to attend:  
Michael Ferrara, Enterprise Projects Manager  
Michael Knuppel, PSSM Project Manager  
Sonny Segal, DTS Chief Information Officer  
Representative from OMB

The Public Safety System Modernization (PSSM) project is a multi-year complex project involving the upgrade of public safety radios, CAD, and records management systems, as well as radio infrastructure. The FY15 approved project description is on ©1-2, while a status report is on ©5-8. The major radio system element is still in negotiations.

The County Executive recommends a minor reduction to the FY15-20 Capital Improvements Program in the amount of \$75,000, which is made possible through lapse in the DTS portion of the effort. This reduces the FY16 funding for Planning, Design, and Supervision from the currently approved \$1.6 million to \$1.525 million. The recommended FY16 appropriation is \$2.025 million, rather than the \$2.1 million estimate approved as a part of the FY15-20 CIP. The Executive's recommended PDF is on ©3-4.

**Staff recommends approval of the CE's recommended amendment.**

## Public Safety System Modernization (P340901)

Category  
Sub Category  
Administering Agency  
Planning Area

General Government  
County Offices and Other Improvements  
County Executive (AAGE03)  
Countywide

Date Last Modified  
Required Adequate Public Facility  
Relocation Impact  
Status

2/26/14  
No  
None  
Ongoing

Total	Thru FY13	Est FY14	Total 6 Years	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Beyond 6 Yrs
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### EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	7,239	132	4,186	2,921	1,321	1,600	0	0	0	0
Land	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0
Construction	71,431	0	48,020	23,411	18,021	4,890	500	0	0	0
Other	31,038	27,742	1,071	2,225	2,225	0	0	0	0	0
<b>Total</b>	<b>109,708</b>	<b>27,874</b>	<b>53,277</b>	<b>28,557</b>	<b>21,567</b>	<b>6,490</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>0</b>

### FUNDING SCHEDULE (\$000s)

Current Revenue: General	6,453	0	3,532	2,921	1,321	1,600	0	0	0	0
Federal Aid	4,065	2,947	1,118	0	0	0	0	0	0	0
G.O. Bonds	57,409	4,027	35,971	17,411	13,021	4,390	0	0	0	0
Short-Term Financing	41,781	20,900	12,656	8,225	7,225	500	500	0	0	0
<b>Total</b>	<b>109,708</b>	<b>27,874</b>	<b>53,277</b>	<b>28,557</b>	<b>21,567</b>	<b>6,490</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>0</b>

### OPERATING BUDGET IMPACT (\$000s)

Maintenance				905	0	0	125	260	260	260
Program-Staff				1,660	0	450	450	360	200	200
Program-Other				3,260	0	0	815	815	815	815
<b>Net Impact</b>				<b>5,825</b>	<b>0</b>	<b>450</b>	<b>1,390</b>	<b>1,435</b>	<b>1,275</b>	<b>1,275</b>

### APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 15	8,046
Appropriation Request Est.	FY 16	2,100
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		96,562
Expenditure / Encumbrances		28,235
Unencumbered Balance		68,327

Date First Appropriation	FY 09
First Cost Estimate	
Current Scope	FY 15 109,708
Last FY's Cost Estimate	108,083

#### Description

This program will provide for phased upgrades and modernization of computer aided dispatch (CAD), law enforcement records management system (LE RMS), 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/LE RMS system, replacement of public safety mobile and portable radios, upgrade of non-public safety mobile and portable radios, and replacement of core voice radio communications infrastructure. The previously approved Fire Station Alerting System Upgrades project (CIP #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 43 existing work sites, 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 provide 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

Cost increase of \$1.4 million in FY16 to reflect continued staff charges resulting from delays in program implementation. Cost increase of \$225,000 in FY15 to reflect reimbursement for the purchase of 61 Mobile Data Computers (MDCs) for the Maryland-National Capital Park and Planning Commission Park Police.

#### Justification

## Public Safety System Modernization (P340901)

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. The manufacturer's support for the voice radio system has begun to be phased out as of 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 has initiated a detailed planning phase that included the use of industry experts to assist with business process analysis and to develop detailed business and technical requirements for the new CAD system. 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 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 implement a project to upgrade and modernize its portable and mobile radio units and subsequently the radio voice communications infrastructure. Acceleration of the public safety radio purchases was initiated 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 and to meet the Federal Communications Commission (FCC) mandated 800 MHz frequency rebanding requirements for nationwide public safety radio frequency interoperability. Now, the installation of the new core radio communication infrastructure is needed. 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 (SAPA) 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**

\$20.936 million was appropriated in FY11 to purchase P-25 compliant radios that allowed the County to complete immediate re-banding within the 800 MHz frequency as required by the FCC. The radio replacement program includes the M-NCPPC Montgomery County Park Police. The future purchase of public safety radios (other than to replace broken equipment) must be able to be supported by a P25 Phase-2 compliant infrastructure. The use of State of Maryland infrastructure will be aggressively pursued in order to minimize costs to Montgomery County. The CAD procurement request will reflect the County's interest in maintaining the station alerting functionality at the current level or better through the CAD system. The RFP for CAD replacement will include replacement of the following systems: CAD, mapping, and the existing Law Enforcement Records Management and Field Reporting systems. Coordination with participating department/agencies and regional partners will continue throughout the project.

### **Fiscal Note**

Funding in FY09 included Urban Area Security Initiative (UASI) grant funding of \$2.055 million and Fire Act grant funding of \$988,000. Funds shall not be used to purchase or implement a new Computer-Aided Dispatch (CAD) system or radio infrastructure until the County Executive provides the County Council with a detailed proposal and accurate cost estimates for the total project scope.

### **Coordination**

PSSM Executive Steering Group, Executive Program Directors, 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)

## Public Safety System Modernization (P340901)

Category  
Sub Category  
Administering Agency  
Planning Area

General Government  
County Offices and Other Improvements  
County Executive (AAGE03)  
Countywide

Date Last Modified 11/17/14  
Required Adequate Public Facility No  
Relocation Impact None  
Status Ongoing

	Total	Thru FY14	Rem FY14	Total 6 Years	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Beyond 6 Yrs
<b>EXPENDITURE SCHEDULE (\$000s)</b>											
Planning, Design and Supervision	7,164	536	3,782	2,846	1,321	1,525	0	0	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	69,100	0	45,689	23,411	18,021	4,890	500	0	0	0	0
Other	33,369	31,144	0	2,225	2,225	0	0	0	0	0	0
<b>Total</b>	<b>109,633</b>	<b>31,680</b>	<b>49,471</b>	<b>28,482</b>	<b>21,567</b>	<b>6,415</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

	Total	Thru FY14	Rem FY14	Total 6 Years	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Beyond 6 Yrs
<b>FUNDING SCHEDULE (\$000s)</b>											
Current Revenue: General	6,378	0	3,532	2,846	1,321	1,525	0	0	0	0	0
Federal Aid	4,065	2,947	1,118	0	0	0	0	0	0	0	0
G.O. Bonds	57,409	7,833	32,165	17,411	13,021	4,390	0	0	0	0	0
Short-Term Financing	41,781	20,900	12,656	8,225	7,225	500	500	0	0	0	0
<b>Total</b>	<b>109,633</b>	<b>31,680</b>	<b>49,471</b>	<b>28,482</b>	<b>21,567</b>	<b>6,415</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

	Total	Thru FY14	Rem FY14	Total 6 Years	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Beyond 6 Yrs
<b>OPERATING BUDGET IMPACT (\$000s)</b>											
Maintenance				905	0	0	125	260	260	260	
Program-Staff				1,660	0	450	450	360	200	200	
Program-Other				3,260	0	0	815	815	815	815	
<b>Net Impact</b>				<b>5,825</b>	<b>0</b>	<b>450</b>	<b>1,390</b>	<b>1,435</b>	<b>1,275</b>	<b>1,275</b>	

### APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 16	2,025
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		104,608
Expenditure / Encumbrances		40,038
Unencumbered Balance		64,570

Date First Appropriation	FY 09
First Cost Estimate	
Current Scope	FY 15 109,633
Last FY's Cost Estimate	109,708

### Description

This program will provide for phased upgrades and modernization of computer aided dispatch (CAD), law enforcement records management system (LE RMS), 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/LE RMS system, replacement of public safety mobile and portable radios, upgrade of non-public safety mobile and portable radios, and replacement of core voice radio communications infrastructure. The previously approved Fire Station Alerting System Upgrades project (CIP #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 43 existing work sites, 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 provide 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

Cost decrease of \$75,000 in FY16 current revenue due to reduction in staffing requirements.

### Justification

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### **Other**

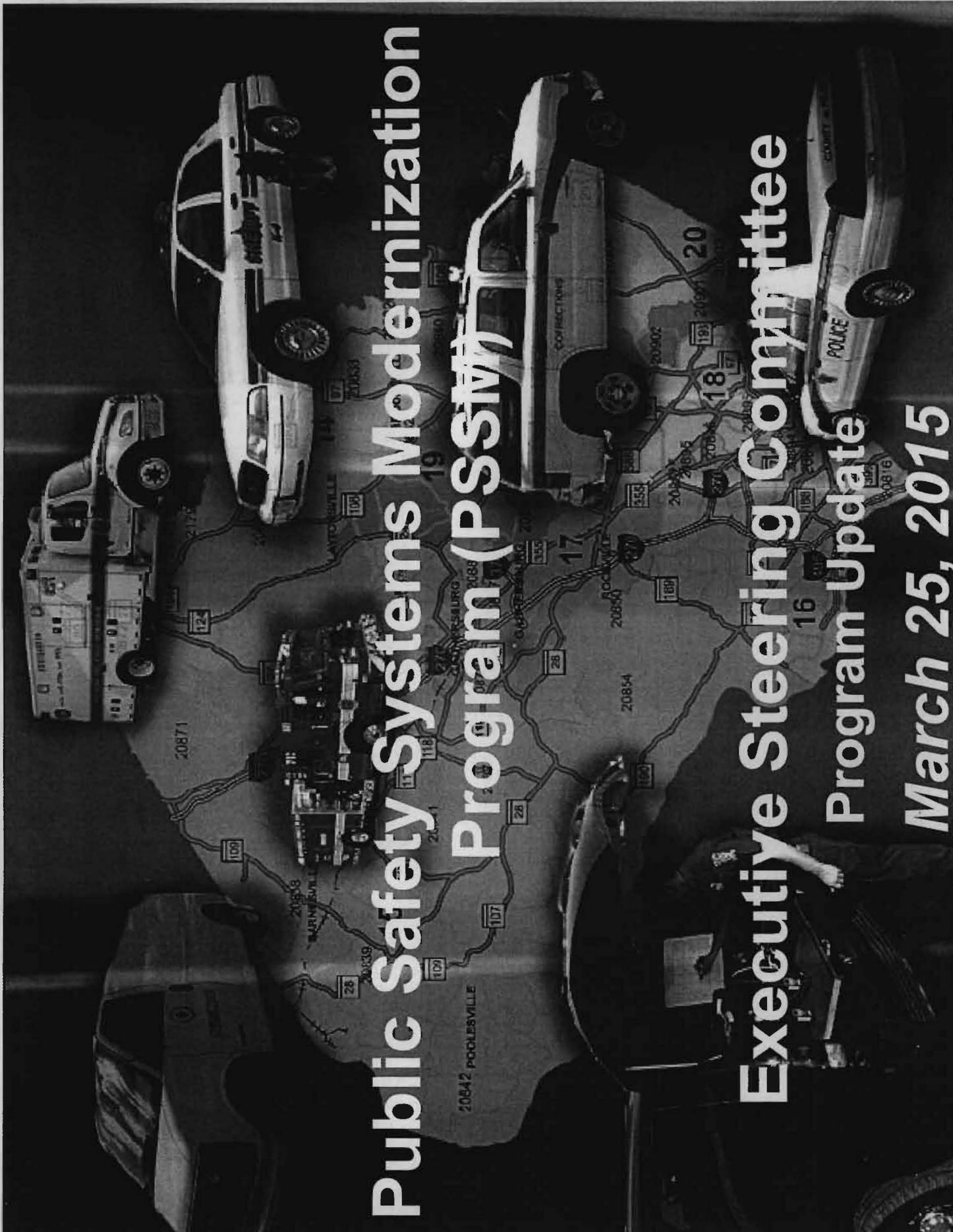
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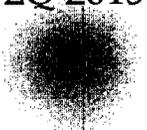
# Public Safety Systems Modernization Program (PSSM)

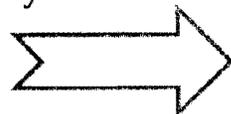
## Executive Steering Committee Program Update

### March 25, 2015

# PSSM Program – High Level Procurement Timeline

## “RFP to Contract Award”

PSSM Projects	RFP Ready to Review	QSC	Negotiations Est. Time (in months)	Contract Award	Est. System Build Out (after contract award)	Expected Useful Life*
Fire Station Alerting 2 Stages (REOI/RFP)	REOI Aug 2014 RFP 4Q2014 <i>Completed</i>	Oct 2014 1Q2015 <i>Completed</i>	- Est. (3-5) <i>WIP</i>	- 2Q2015	18-24 months	10+ years
CAD	Feb 2013 <i>Completed</i>	3Q 2013 <i>Completed</i>	Est. (4) ATD (6) <i>Completed</i>	2Q 2014 <i>Completed - 06/27/2014</i>	18-24 months	8-15 years
Radio Infrastructure	1Q 2014 <i>Completed</i>	4Q 2014 <i>Completed</i>	Est. (4 - 6) <i>WIP</i> First negotiation sessions scheduled mid-May	2Q 2015 	24-36 months	10-15 years
LE-RMS	Requirements gathered <i>Completed</i> Phase one 4Q2014			TBD	12-18 months	6-8 years



Note: Quarters are calendar quarters, not Fiscal Quarters \* maintenance and refreshes (HW, SW, etc.) will occur during the useful life

# PSSM Program – High Level Deployment Timeline

## “Project Team Kickoff to Go Live”

PSSM Projects	Project Kickoff	Overall Planning Finalized	Implementation Period	Final Acceptance Testing	Go/No Go Decision Point	Go Live*
CAD	Sept 2014 <i>Completed</i>	1H2015 <i>WIP</i>	2H2015	4Q2015- 1Q2016	Jan 2016	1Q2016
Radio Infrastructure						
Fire Station Alerting						
LE-RMS						

Note: dates are Calendar Years, not Fiscal Years



# PSSM Program Challenges / Risks

- ❖ **“In-kind” Resources** – resource involvement will be critical and intense for the duration of the PSSM Program. Upcoming key activities included vendor contract negotiations, planning sessions, training, and project implementations. An impromptu meeting of the PSSM ESC may be initiated to reconfirm or change prioritization of resources.
- ❖ **Competing initiatives** – continually monitoring and adjusting the stakeholder engagement strategy that ensures that there is consistent participation from the operational areas at the regular program workgroup meetings and that they maintain visibility throughout requirements validation, design, implementation, and testing of the solutions.
- ❖ **ECC Consolidation** – the challenges associated with consolidating and civilianizing public safety emergency communications are complex and require a great deal of care and diligence to sustain the critical services these operations provide while migrating from the status quo and integration into the PSSM Program projects.