



# Public Safety System Modernization (P340901)

|               |                                       |                      |                  |
|---------------|---------------------------------------|----------------------|------------------|
| Category      | General Government                    | Date Last Modified   | 01/11/19         |
| SubCategory   | County Offices and Other Improvements | Administering Agency | County Executive |
| Planning Area | Countywide                            | Status               | Ongoing          |

## EXPENDITURE SCHEDULE (\$000s)

| Cost Elements                    | Total          | Thru FY18     | Rem FY18      | Total 6 Years | FY 19         | FY 20 | FY 21 | FY 22 | FY 23 | FY 24 | Beyond 6 Years |
|----------------------------------|----------------|---------------|---------------|---------------|---------------|-------|-------|-------|-------|-------|----------------|
| Planning, Design and Supervision | 9,543          | 3,379         | 5,229         | 935           | 935           | -     | -     | -     | -     | -     | -              |
| Construction                     | 33,594         | 2,635         | 15,859        | 15,100        | 15,100        | -     | -     | -     | -     | -     | -              |
| Other                            | 67,615         | 67,615        | -             | -             | -             | -     | -     | -     | -     | -     | -              |
| <b>TOTAL EXPENDITURES</b>        | <b>110,752</b> | <b>73,629</b> | <b>21,088</b> | <b>16,035</b> | <b>16,035</b> | -     | -     | -     | -     | -     | -              |

## FUNDING SCHEDULE (\$000s)

| Funding Source               | Total          | Thru FY18     | Rem FY18      | Total 6 Years | FY 19         | FY 20 | FY 21 | FY 22 | FY 23 | FY 24 | Beyond 6 Years |
|------------------------------|----------------|---------------|---------------|---------------|---------------|-------|-------|-------|-------|-------|----------------|
| Contributions                | 32             | 32            | -             | -             | -             | -     | -     | -     | -     | -     | -              |
| Current Revenue: General     | 9,826          | 6,719         | 2,172         | 935           | 935           | -     | -     | -     | -     | -     | -              |
| Federal Aid                  | 2,947          | 2,947         | -             | -             | -             | -     | -     | -     | -     | -     | -              |
| G.O. Bonds                   | 55,591         | 25,752        | 16,739        | 13,100        | 13,100        | -     | -     | -     | -     | -     | -              |
| Short-Term Financing         | 42,356         | 38,179        | 2,177         | 2,000         | 2,000         | -     | -     | -     | -     | -     | -              |
| <b>TOTAL FUNDING SOURCES</b> | <b>110,752</b> | <b>73,629</b> | <b>21,088</b> | <b>16,035</b> | <b>16,035</b> | -     | -     | -     | -     | -     | -              |

## OPERATING BUDGET IMPACT (\$000s)

| Impact Type       | Total 6 Years | FY 19        | FY 20        | FY 21        | FY 22        | FY 23        | FY 24        |
|-------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Maintenance       | 3,600         | 600          | 600          | 600          | 600          | 600          | 600          |
| Program-Staff     | 1,200         | 200          | 200          | 200          | 200          | 200          | 200          |
| Program-Other     | 1,584         | 264          | 264          | 264          | 264          | 264          | 264          |
| <b>NET IMPACT</b> | <b>6,384</b>  | <b>1,064</b> | <b>1,064</b> | <b>1,064</b> | <b>1,064</b> | <b>1,064</b> | <b>1,064</b> |

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

|                             |         |                          |         |
|-----------------------------|---------|--------------------------|---------|
| Appropriation FY 20 Request | (96)    | Year First Appropriation | FY09    |
| Cumulative Appropriation    | 110,848 | Last FY's Cost Estimate  | 110,848 |
| Expenditure / Encumbrances  | 98,889  |                          |         |
| Unencumbered Balance        | 11,959  |                          |         |

## PROJECT DESCRIPTION

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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

Reduction in Federal Aid of \$96,000.

## PROJECT 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. 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 (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

\$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

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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. Funding schedule reflects FY18 supplemental adding \$32,000 in Contributions for additional equipment required for Local Fire Rescue Departments (LFRDs). FY18 funding switch is due to a transfer of Current Revenue General for \$283,000 from Technology Modernization (MCG) project offset by an equal reduction in Short Term Financing.

## COORDINATION

PSSM Executive Steering Committee, 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)