

Legislative Budget Analysis
Proposed FY 2017 Operating and Capital Budgets
Office of the County Auditor
Baltimore County, Maryland
May 6, 2016



Emergency Communications Center

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Questions to Department Sent	Friday, April 15 (issue questions) Tuesday, April 19 (line item questions)
Responses Requested By	Friday, April 22 (issue questions) Monday, April 25 (line item questions)
Responses Received	Friday, April 29*
Analysis Due for Review	Friday, April 29
Analysis Completed	Friday, May 6
* Analysis considers all agency responses.	

BALTIMORE COUNTY
FISCAL YEAR 2017 RECOMMENDED BUDGET

EMERGENCY COMMUNICATIONS CENTER (014)

BUDGET SUMMARY				
\$ in Thousands				
	GENERAL	SPECIAL	TOTAL	% Change Prior Year
PROPOSED CHANGE				
FY 2016 - 2017 Change	\$ 822.9	\$ -	\$ 822.9	
BUDGET TRENDS				
FY 2015 Actual	\$ 11,902.0	\$ -	\$ 11,902.0	
FY 2016 Approp.	12,258.1	-	12,258.1	3.0%
FY 2017 Proposed	13,081.0	-	13,081.0	6.7%
FY 2017 Budget Analysis	\$ 13,081.0	\$ -	\$ 13,081.0	6.7%
POTENTIAL REDUCTIONS	\$ -	\$ -	\$ -	

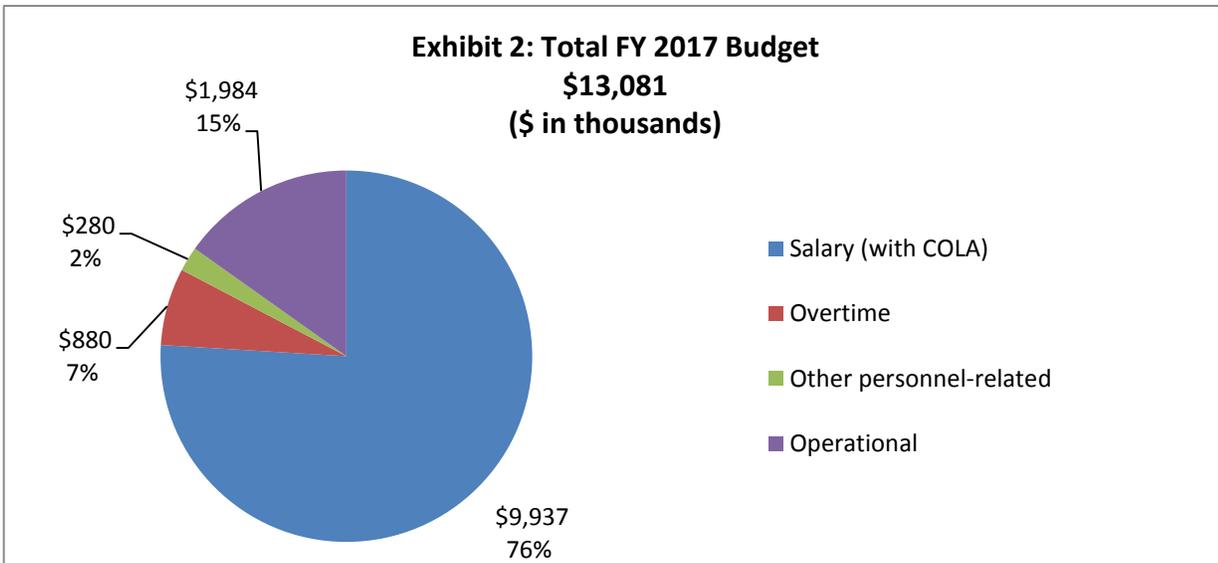
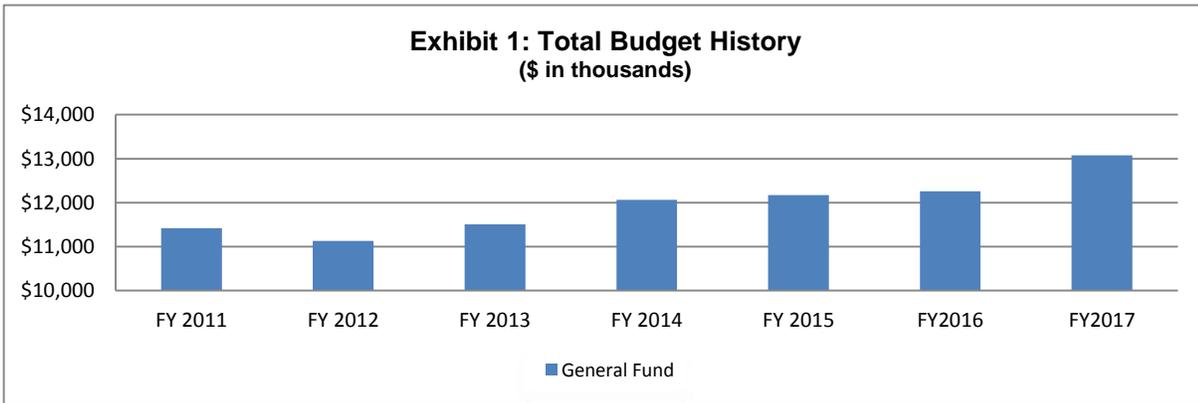
PERSONNEL				
	GENERAL		SPECIAL	
	FULL-TIME	PART-TIME	FULL-TIME	PART-TIME
PROPOSED CHANGE				
FY 2016 - 2017 Change	3	0	0	0
BUDGET TRENDS				
FY 2015 Actual	188	2	0	0
FY 2016 Approp.	188	2	0	0
FY 2017 Proposed	191	2	0	0
FY 2017 Budget Analysis	191	2	0	0
POTENTIAL REDUCTIONS	0	0	0	0
VACANCY DATA				
Positions vacant as of April 22, 2016	11	0	0	0

* Provided by the Office of Budget & Finance

EMERGENCY COMMUNICATIONS CENTER (014)

BUDGET SUMMARY:

The proposed FY 2017 budget for the Emergency Communications Center totals \$13.1 million, an increase of \$823 thousand, or 6.7%, over the FY 2016 budget. The increase is primarily attributable to personnel expenses. As reflected in Exhibit 2, the majority of costs (85%) for the Center are personnel related. **See Exhibits 1 through 3 for additional detail.**



EMERGENCY COMMUNICATIONS CENTER (014)

Exhibit 3			
FY 2017 Proposed Budget (\$ in 000's)			
How Much it Grows:	<u>General Fund</u>	<u>Special Fund</u>	<u>Total</u>
2016 Appropriation	\$ 12,258	\$ -	\$ 12,258
2017 Request	13,081	-	13,081
\$ Increase	\$ 823	\$ -	\$ 823
% Increase	6.7%	-	6.7%
Where it Goes:			
General Fund:			
Personnel Expense:			\$ 814
Overtime			235
2% COLA			213
5 additional ECT Trainee positions (FY 16 mid-year)			200
Position reclassifications (to implement operational changes)			99
Increments and longevities			98
Standby			57
Turnover (3.3% to 3.1%)			22
Shift Differential			(34)
2 deleted ECT I positions			(82)
Other salary adjustments			6
Operating Expenses:			9
Data processing Software (upgrade to phone/voicemail system)			27
Telephones			22
Operational Equipment Maintenance			7
Training (Partially paid by State and biennial recertification)			(18)
Datalines			(31)
Other Changes			2
Total:			\$ 823

EMERGENCY COMMUNICATIONS CENTER (014)

POTENTIAL BUDGET REDUCTIONS:

In light of the Center's recent and planned significant operational changes (see Issues #1, 2, and 3 below), this analysis identifies no potential reductions.

SIGNIFICANT PROGRAM/POLICY INITIATIVES AND/OR CHANGES:

1. Pitman Fixed Shift Schedule \$274,810

The proposed FY 2017 budget includes an increase of \$274,810 in salary-related costs over the FY 2016 budget related to the Emergency Communication Center's change for employees to work a Pitman fixed shift schedule. Under the Pitman schedule, the Center's work shift changed from 3 teams working 8-hour fixed shifts to 4 teams working 12-hour rotating shifts. The Administration advised that the change would "improve customer service delivery and decrease the turnover rate in the Emergency Communications Center by placing an adequate number of tenured, knowledgeable, and cross-trained employees across all shifts."

In conjunction with the change, on January 19, 2016, the Council approved Bill 89-15, which amended the County's classification and compensation plans 1) to provide a 5.484% increase to Emergency Communications (EC) Technicians; 2) to reclassify (one grade increase) the positions of EC Manager, Assistant Chief, and Chief; and 3) to extend the eligibility of stand-by pay to the positions of EC Technician Trainee, EC Assistant Supervisor, and EC Supervisor.

To make this operational change (and those noted in Issue #2 (9-1-1 Center Operations) and Issue #3 (Training Academy)), the Center advised that in FY 2017, it will move to a staffing configuration consisting of 5 EC Managers, 17 EC Supervisors, and 16 EC Assistant Supervisors. To achieve this new staffing configuration, the following positions will be reclassified, resulting in a salary increase of \$98,550 over the FY 2016 appropriation.

- 10 EC Technician I positions to EC Technician II positions;
- 10 EC Technician II positions to EC Assistant Supervisor positions;
- 6 EC Assistant Supervisor positions to EC Supervisor positions; and
- 1 EC Supervisor position to EC Manager position.

The Center advised that implementation of the Pitman schedule will also impact salaries,

EMERGENCY COMMUNICATIONS CENTER (014)

overtime, shift differential, and stand-by in FY 2017 by \$176,000, as follows.

- Salaries (decrease of \$82,000): 2 EC Technician I positions were deleted with the adjustment of staffing requirements for shifts.
- Overtime (increase of \$235,000): The FY 2017 overtime budget (\$880,308) includes \$456,315 since staff will earn 4 hours per bi-weekly pay of overtime under the Pitman schedule; another \$423,993 is included for all other overtime. The Center projects that its FY 2016 overtime costs will total approximately \$1.2 million, or approximately \$519,000 (81%) over budget.
- Shift differential (decrease of \$34,000): Only 1/2 of the staff will be eligible for shift differential under the new shift schedule compared to 2/3's under the previous shift schedule.
- Stand-by (increase of \$57,000): In FY 2017, when full staffing is anticipated, stand-by is expected to increase but at a lesser rate/cost.

As previously mentioned, the Administration advised that service delivery should improve with implementation of the Pitman schedule. The Center advised that it uses a multi-agency committee to review system level issues, receive direct customer feedback on performance, and recommend changes based on observed findings. Specific metrics include:

- Call-taking: average call handle time; calls handled per shift; compliance with protocol; and customer service reviews.
- Fire & Police dispatch: compliance with protocol; daily employee evaluations for dispatch effectiveness and call variances; and post-mortem incident reviews for all significant incidents.

The Center should be prepared to discuss:

- ***The transition to the Pitman schedule, including any challenges/issues encountered;***
- ***Benefits of the new staff configuration (rank, seniority, cross-trained staff) and ensuring the correct balance with each shift; and***
- ***Impact on service delivery.***

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2. 9-1-1 Center Operations \$1.3 million (OIT capital); \$539,580 (Police Dept. special fund)

During the first quarter of FY 2017, it is anticipated that the Center will initiate simultaneous 9-1-1 call-taking operations at both the Center's primary (Towson) and back-up (Hunt Valley) locations. The Center advised that call-taking staff will be split between the two locations with both centers operating on a 24x7 basis, which will provide continuous operations if one of the two facilities goes off-line or is non-operational. The Center advised that in order to implement the Pitman schedule (see Issue #1) and to handle dual Center operations on a 24x7 basis, it needs to add the 4th shift in FY 2017 for 1 EC Manager, 4 EC Supervisor, and 4 EC Assistant Supervisor positions. The Center also advised that efforts have been in progress for a number of years to implement dual center operations with delays occurring due to infrastructure installation issues and the change to the Pitman schedule.

The proposed FY 2017 capital budget also includes \$1.3 million in Pay-As-You-Go (PAYGO) funding for the Office of Information Technology's Enhanced Productivity Thru Technology capital project, earmarked to upgrade the telephony, networks, workstations, etc. at the Center's primary and back-up locations. The proposed FY 2017 Police Department special fund program budget also includes \$539,580 to gather and refine requirements from 9-1-1, Fire, and Police in preparation for a request for proposal to replace the County's aging computer-aided dispatch (CAD) system.

The upcoming May 26, 2016 Council agenda includes a resolution to accept a donation of up to \$161,082 from the State's Department of Public Safety and Correctional Services' Emergency Number Systems Board (ENSB) to purchase 9-1-1 phone system enhancements that will allow the County's back-up 9-1-1 Center in Hunt Valley to receive 9-1-1 emergency calls for Baltimore City in the event the City's 9-1-1 system is off-line or non-operational. The Office of Budget and Finance advised that the County's back-up 9-1-1 center was originally built as a regional back-up 9-1-1 center for four central Maryland local jurisdictions (Baltimore, Carroll, and Harford Counties and Baltimore City). According to the Administration, the recent Memorandum of Understanding (MOU) with Baltimore City states that the City's 9-1-1 emergency calls will be directed through the County's 9-1-1 system and answered by County call-takers. The City's call information would then be forwarded to Baltimore City Police, Fire, and EMS for dispatch of their emergency personnel.

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The Center should be prepared to discuss:

- *The basis for having both locations operational 24x7 and the associated costs reflected in the FY 2017 operating budget (e.g., utility cost);*
- *Plans for the various system upgrades; and*
- *The cost of providing back-up service to the City and whether the MOU is structured to allow the County to recoup the cost of providing this service, should the City require it.*

3. Training Academy \$221,728

The proposed FY 2017 budget includes an increase of \$221,728 over the FY 2016 appropriation for operational changes at the Center's Training Academy. Specifically, the FY 2017 budget includes \$199,954 for 5 (FY 2016 mid-year) additional EC Technician Trainee positions and \$21,774 in decreased turnover savings. The Center advised that, "the primary reason for staff losses has always been the inability of new trainees to master the requisite skills of the training program." This has been reflected in the Center's actual turnover for the previous years, as follows:

- FY 2012 - \$590,587, or 6.6%;
- FY 2013 - \$682,833, or 7.6%;
- FY 2014 - \$435,797, or 4.9%; and
- FY 2015 - \$1.0 million, or 11%.

The Center advised that after the high turnover in FY 2015, it initiated an aggressive recruitment process in FY 2016. With the assistance of the Office of Human Resources, the recruitment process was accelerated with advertising for the 5 EC Technician Trainee positions and subsequent testing conducted on an almost continuous basis during the fiscal year. As a result, the Center advised that these recruitment actions have been successful, with turnover savings projected for FY 2016 to be approximately \$360,900, or 3.7%.

In light of these efforts, the Center plans to reassign an EC Supervisor position to the Training Academy in FY 2017 to guarantee a higher level of management control directly within the Academy. The Center advised that the 5 new (permanent) EC Technician Trainee positions will allow for new trainees in the training "pipeline" at all times, so that new employees will be in the

EMERGENCY COMMUNICATIONS CENTER (014)

training cycle before vacancies occur. As a result, the proposed FY 2017 turnover budget is \$300,733, or 3.1% (a decrease in turnover savings of \$21,774 from the FY 2016 appropriation). The Center currently has 11 vacant positions as of April 22, 2016 (\$493,243 in budgeted salaries for FY 2017) for the following positions: 4 EC Supervisors; 4 EC Assistant Supervisors; 2 ECT Trainees; and 1 EC Manager.

The Center should be prepared to discuss:

- ***How the Center's staff retention compares to State-wide and national statistics;***
- ***The status of filling the vacant positions; and***
- ***The new approach of a Training Academy with permanent trainee positions.***

OTHER ISSUES:

4. Emergency Communications System

The County's Emergency Communications Center opened in January 1980. Over the years, the Center has undergone numerous changes, moving from relying on basic phone lines to modern enhanced 9-1-1 service. In February 2012, the County completed the renovation of its primary Emergency Communications Center and the replacement of its public safety radio communications network (\$76 million). At the time, the Office of Information Technology advised that the new Center could handle emergency service calls with improved equipment and enhanced communication methods. The Office also advised that the replacement of the public safety radio communications network would allow for interoperability with the State and other regions as well as expand coverage and improve communication quality.

The ENSB is responsible for cooperatively working with the counties to provide an effective and efficient 9-1-1 system through the administration of 9-1-1 Trust Fund revenues. The ENSB (in its 2014 Annual Report) provided the following assessment of the 9-1-1 statewide system: "The existing 9-1-1 infrastructure has performed admirably for decades; however, new data rich communications devices and services are driving the existing 9-1-1 infrastructure towards its operational limits. Consumers are increasingly relying on enhanced wireless and IP [Internet Protocol]-based communications technologies, which offer expanded data capabilities such as text, picture, and video messaging." These enhanced wireless and IP-based communication

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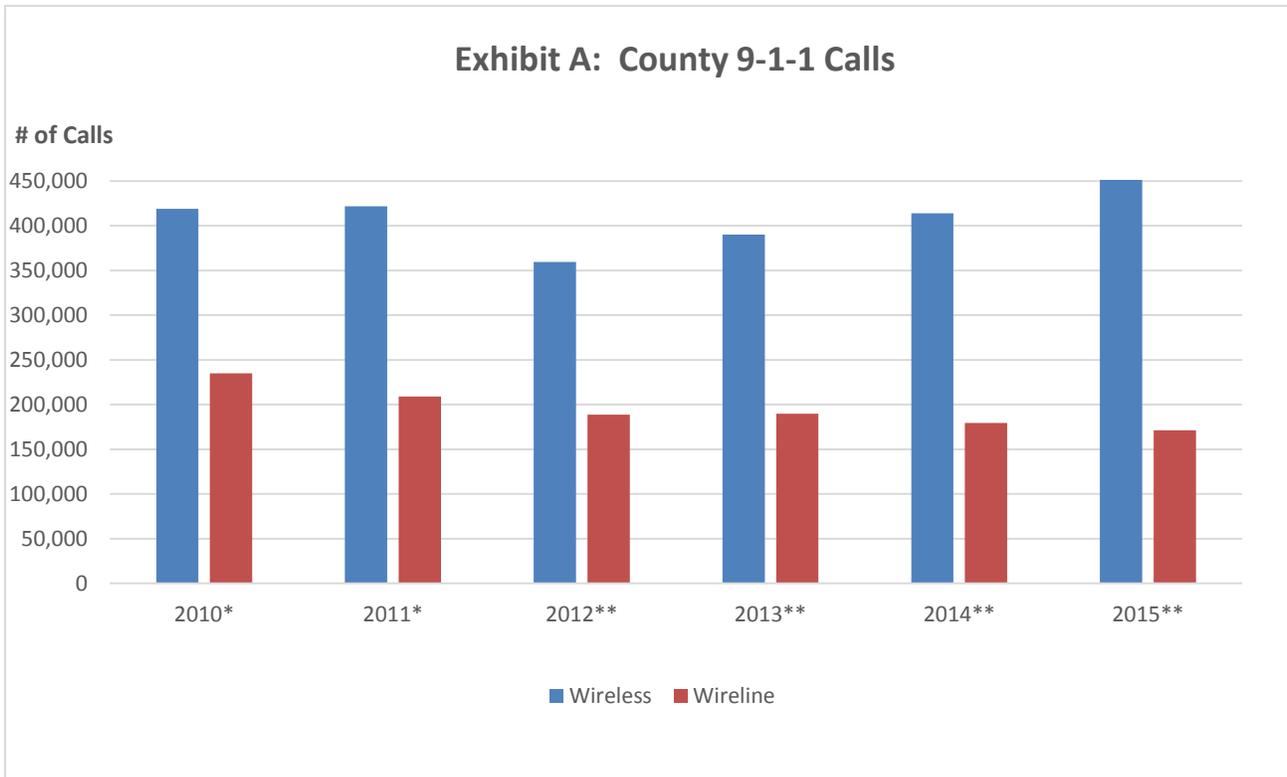
technologies are collectively referred to as “Next Generation 9-1-1.” In addition to the benefits of expanded data capabilities provided to callers, Next Generation 9-1-1 technologies also offer first responders the ability to assess (and respond to) an emergency before arriving on the scene.

In March 2013, Frederick County became the first jurisdiction in the State (and one of the first in the nation) to pilot text-to-9-1-1 (one of the Next Generation 9-1-1 technologies) to its residents using Verizon Wireless Service. Text-to-9-1-1 is intended primarily for use in emergency situations where the individual is hearing impaired or is unable to make a voice call (e.g., during a medical emergency that renders the person incapable of speech, or in other situations where the sound of a voice call may increase the risk to the caller). The ENSB’s goal is to have the text-to-9-1-1 service available throughout Maryland within the next 12 to 24 months.

However, the ENSB’s 2014 Annual Report also identified that a significant impediment to implementing these technologies is the recurring cost associated with securing an IP network with sufficient bandwidth, reliability, and redundancy for the transport of 9-1-1 calls and data. Because of its design, Next Generation 9-1-1 technologies cause a significant shift in one-time, up-front (capital) and recurring monthly expenses. Currently, the ENSB funds capital projects while counties fund recurring expenses. For example on February 1, 2016, the Council approved a resolution for the County to accept a donation of up to \$12,863 from the ENSB for the installation of conduits related to the replacement of existing copper-wire telephone circuits with fiber optic circuits. The Office of Budget and Finance advised that the fiber optic circuits will allow the 9-1-1 Center to provide Next Generation 9-1-1 services by enabling the Center to receive and process large bandwidth data transmissions associated with multi-media text messaging and photographs in addition to emergency telephone calls. The Office of Information Technology advised that the current system is capable of handling text messages; however, a text messaging standard first needs to be adopted by the ENSB. Once the standard has been adopted, then configuration will be necessary to implement it. Further, the Office advised that the current system will be capable of making the transition to Next Generation 9-1-1 once the Office has completed the scope of work and cost for the upgrade to a Next Generation 9-1-1 solution in mid-FY 2017 (Public Safety Communications Systems Upgrade Master Plan - \$536,640 in FY 2017 Police Department special fund program).

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To provide perspective on the number of calls the 9-1-1 Center handles, in 2014, Baltimore County received 593,604 of the 4.8 million 9-1-1 calls made in Maryland, which was only behind Baltimore City (1.2 million) and Prince George's County (1.0 million). Baltimore County's 9-1-1 calls from wireless devices (e.g., cell phones) have outpaced calls from wireline devices (e.g., landlines) as reflected below in Exhibit A.



* Source - Emergency Number Systems Board Annual Reports (2010 - 2011)

** Emergency Communications Center

The Center should be prepared to discuss:

- **How the County's current public safety radio communications network compares to those of other Maryland jurisdictions; and**
- **The potential cost impact of Next Generation 9-1-1 technologies to future operating and capital budgets.**

BALTIMORE COUNTY
 FISCAL YEAR 2017 RECOMMENDED BUDGET

EMERGENCY COMMUNICATIONS CENTER (014)

APPROPRIATION DETAIL

	FY 2015 ACTUAL	FY 2016 APPROP	FY 2017 REQUEST	NET CHANGE	
				AMOUNT	%
<u>General Fund</u>					
1401 Emergency Communications Center	\$ 11,902,011	\$ 12,258,077	\$ 13,080,958	\$ 822,881	6.7%

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EMERGENCY COMMUNICATIONS CENTER (014)

PERSONNEL DETAIL

	FY 2015 ACTUAL		FY 2016 APPROP		FY 2017 REQUEST		NET CHANGE	
	FULL	PART	FULL	PART	FULL	PART	FULL	PART
<u>General Fund</u>								
1401 Emergency Communications Center	188	2	188	2	191	2	3	0