

Legislative Budget Analysis
Proposed FY 2017 Operating and Capital Budgets
Office of the County Auditor
Baltimore County, Maryland
May 17, 2016



Office of Information Technology

Director: Rob Stradling

Budget Office Analyst: Rich Sterba

Legislative Analysts: Zachary Ament & Scott Mitchell

Questions to Department Sent	Friday, April 15 (issue questions) Monday, April 25 (line item questions)
Responses Requested By	Wednesday, April 27 (issue questions) Monday, May 2 (line item questions)
Responses Received	Monday, May 2 (issue questions)* Friday, April 29 (line item questions)*
Analysis Due for Review	Monday, May 9
Analysis Completed	Tuesday, May 17
* Analysis considers all agency responses.	

BALTIMORE COUNTY
FISCAL YEAR 2017 RECOMMENDED BUDGET

OFFICE OF INFORMATION TECHNOLOGY (069)

BUDGET SUMMARY				
\$ in Thousands				
	GENERAL	CAPITAL	TOTAL	% Change Prior Year
PROPOSED CHANGE				
FY 2016 - 2017 Change	\$ 1,585.9	\$ 4,144.9	\$ 5,730.8	
BUDGET TRENDS				
FY 2015 Actual	\$ 23,732.7	\$ 7,653.9	\$ 31,386.6	
FY 2016 Approp.	25,963.4	8,749.3	34,712.7	10.6%
FY 2017 Proposed	27,549.3	12,894.2	40,443.5	16.5%
FY 2017 Budget Analysis	27,364.3	12,194.2	39,558.5	-2.2%
POTENTIAL REDUCTIONS	\$ 185.0	\$ 700.0	\$ 885.0	

PERSONNEL		
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	GENERAL	
	FULL-TIME	PART-TIME
PROPOSED CHANGE		
FY 2016 - 2017 Change	(10)	17
BUDGET TRENDS		
FY 2015 Actual	115	89
FY 2016 Approp.	90	119
FY 2017 Proposed	80	136
FY 2017 Budget Analysis	80	136

POTENTIAL REDUCTIONS

VACANCY DATA

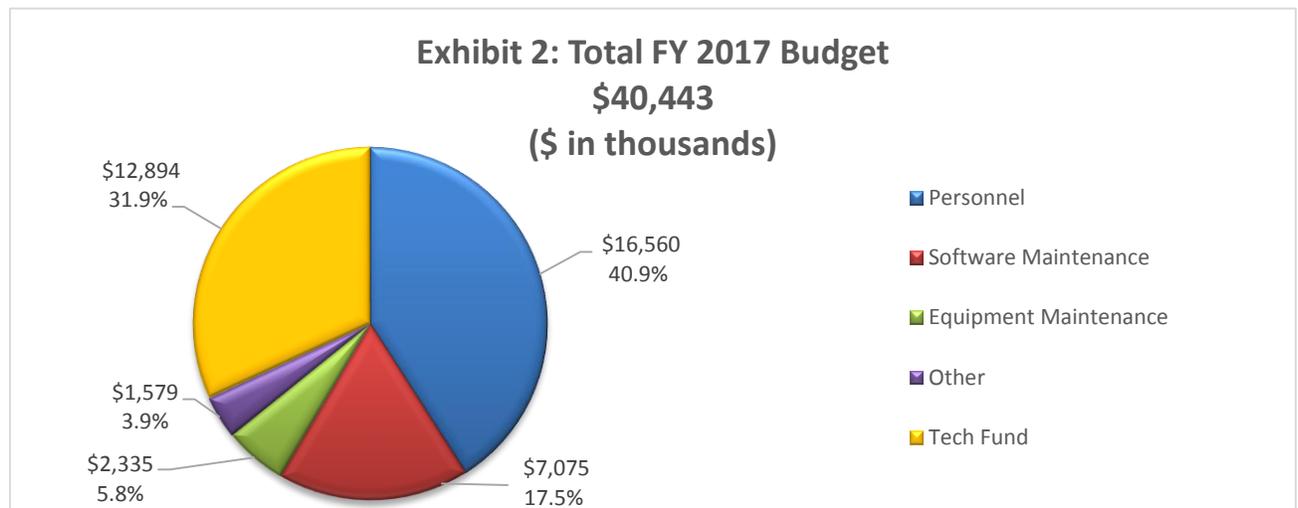
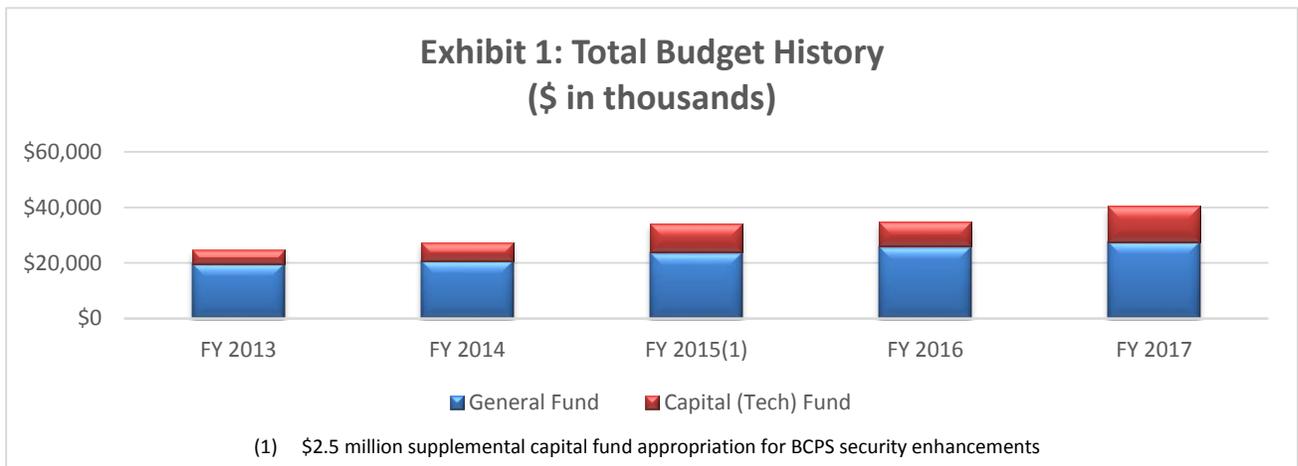
Positions vacant as of April 22, 2016*	0	22
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* Provided by the Office of Budget & Finance

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BUDGET SUMMARY:

The proposed FY 2017 budget for the Office of Information Technology totals \$40.4 million, an increase of \$5.7 million, or 16.5%, over the FY 2016 budget. The General Fund portion of the budget totals \$27.5 million and increases by \$1.6 million, or 6.1%, primarily due to personnel-related expenses. The Capital Fund portion of the budget for the County's Enhanced Productivity Thru Technology project (Tech Fund initiatives) totals \$12.9 million and increases by \$4.1 million, or 47.4%. Of the proposed FY 2017 budget, \$16.5 million (or 41%) covers personnel costs; \$12.9 million (or 32%) is for technology initiatives; and the remainder is mostly for software and equipment maintenance for General Government agencies. **See Exhibits 1-3 for additional detail.**



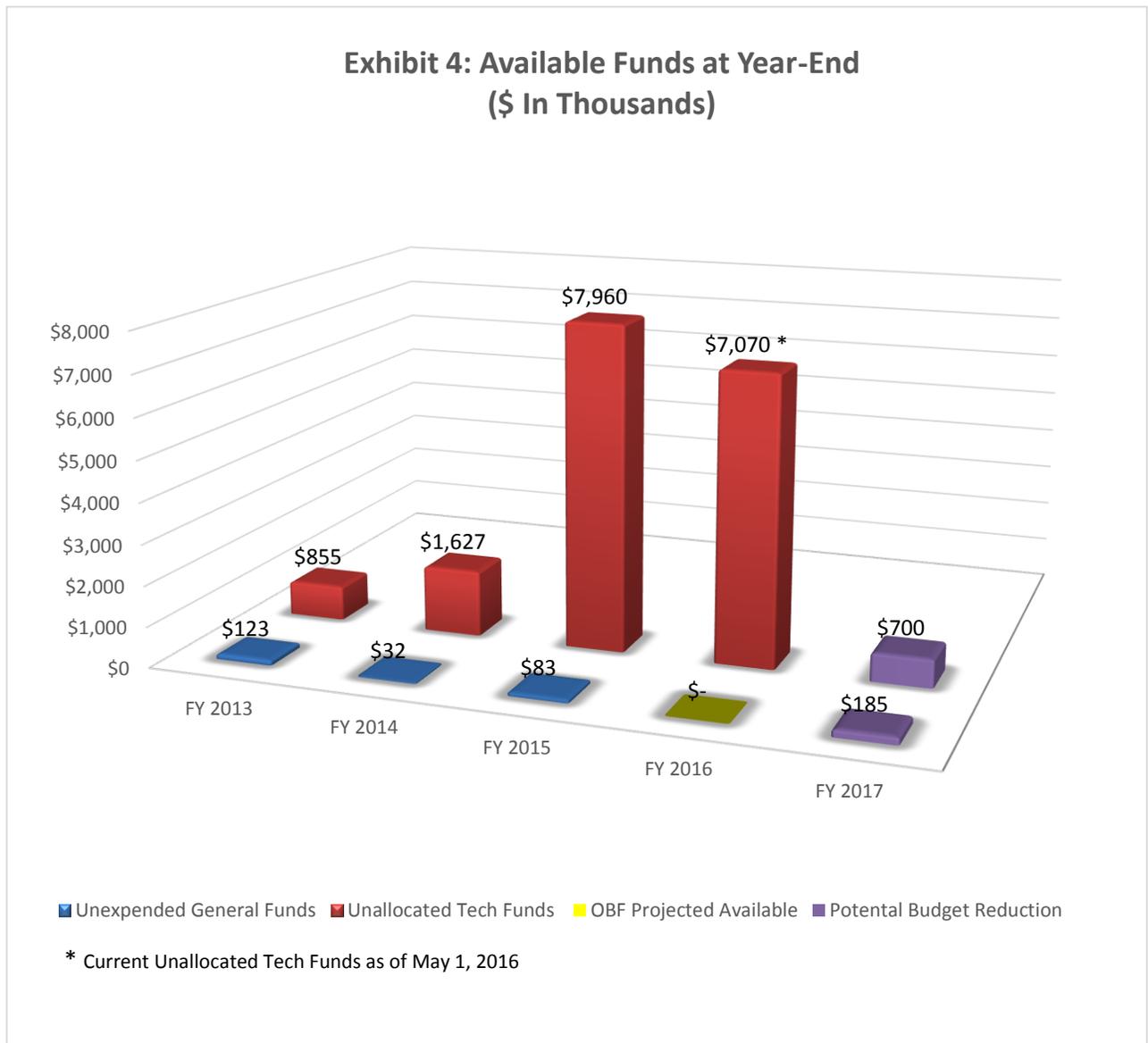
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Exhibit 3			
FY 2017 Proposed Budget (\$ in 000's)			
How Much it Grows:	<u>General Fund</u>	<u>Capital Fund</u>	<u>Total</u>
2016 Appropriation	\$ 25,963	\$ 8,749	\$ 34,712
2017 Request	<u>27,549</u>	<u>12,894</u>	<u>40,443</u>
\$ Increase	\$ 1,586	\$ 4,145	\$ 5,731
% Increase	6.1%	47.4%	16.5%
Where it Goes:			
General Fund:			
Personnel Expense:.....			\$ 1,084
7 FY 2016 Mid-Year Additions.....		482	
2% COLA.....		325	
Increments and Longevities.....		151	
Other Personnel-Related Expenses.....		151	
Reorganization Costs.....		90	
Turnover (4.1% to 4.5%).....		(115)	
Operating Expenses:.....			502
Software Maintenance.....		379	
Equipment Maintenance.....		71	
Conferences and Workshops.....		20	
Professional Services.....		20	
Other Changes.....		12	
Capital Fund - Enhanced Productivity Through Technology Project.....			4,145
Total:.....			\$ 5,731

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POTENTIAL BUDGET REDUCTIONS:

This analysis identifies a total of \$885 thousand in potential budget reductions. Specifically, this analysis identifies \$185 thousand in potential General Fund budget reductions, which represents less than 1% of the Office's proposed FY 2017 General Fund budget, and a \$700 thousand potential Tech Fund budget reduction, which represents 5.4% of the Office's proposed FY 2017 Capital Fund budget. Since FY 2013, the Office has ended the fiscal year with an average of \$79 thousand in unexpended General Funds and an average of \$3.5 million in unallocated Tech Funds. In FY 2016, the Office of Budget and Finance estimates no General Fund departmental savings.



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1. Increase Turnover to 5.0% of Salaries (0104): \$82,961

The proposed FY 2017 budget includes Office-wide turnover savings totaling \$766,652, or 4.5% of salaries totaling \$16.7 million for 216 authorized positions. However, a 4-year analysis indicates that turnover has been under-budgeted in recent years, with actual turnover savings averaging 7.2%. As can be seen in Exhibit 4 (page 4), the Office has utilized these significant salary savings for other purposes, finishing each recent fiscal year with a relatively low level of funds remaining. As of April 22, 2016, the Office has 22 vacant positions (4 positions have been vacant since the end of calendar year 2014) with \$1.2 million in FY 2017 budgeted salaries. The typical historical turnover analysis would yield a reduction totaling more than \$470,000 based on historical average turnover of 7.2%. However, it is noteworthy that at no time in recent years has actual turnover been less than \$662,215, or 5.3% of budgeted salaries. This potential reduction would increase turnover savings to \$849,613, or 5.0% of budgeted salaries totaling \$16.7 million, which would provide sufficient flexibility for the Office to meet its salary needs. Should the Office require additional funding for unplanned non-salary costs, as it has in past years, or should the Office succeed in more fully staffing its authorized positions, the Administration could request a budget appropriation transfer from the \$1.0 million Reserve for Contingencies General Fund Program (4701) or could request approval of a supplemental appropriation from General Fund Surplus for the intended purpose. In such potential events, the need for additional funding would be disclosed, allowing the County Council the opportunity to exercise its legislative oversight and approve or deny the request.

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Schedule of Historical Turnover Savings					
Fiscal Year	Budget/ Request	Turnover %	Actual/Estimated/ Reduced Amount	% of Budg/Req.	Over/(Under) Appropriation/ Reduction
2013	\$438,989	3.7%	\$653,995	5.4%	\$215,006
2014	\$453,184	3.7%	\$662,215	5.3%	\$209,031
2015	\$604,038	4.3%	\$1,344,397	9.4%	\$740,359
2016	\$651,711	4.1%	\$1,384,992 ¹	8.8%	\$733,281
Average	\$536,981	3.9%	\$1,011,400	7.2%	\$474,419
2017	\$766,652	4.5%	\$849,613	5.0%	\$82,961
Notes:					
¹ Office's projection.					

2. Reduce Applications (6902) – Data Processing Software Rental (0424) \$102,008
- The proposed FY 2017 budget includes \$3,727,328 for software maintenance. A review of the FY 2017 software maintenance schedules provided by the Office shows \$102,008 budgeted for the annual maintenance costs associated with the County's pension administration software (CPAS). However, since FY 2003, any expenses necessary for the administration and operation of the Employees' Retirement System have been borne directly by the System. The Office has advised in prior budget hearings that it disagrees with this reduction because it has been instructed by the Administration to centralize all County maintenance costs into the Office's budget. However, the FY 2017 Emergency Communications Center's budget analysis disclosed that the Center's maintenance costs are included in the Center's budget. The Office of Budget and Finance advised that this practice is in place because the Center undergoes an annual external audit and the audit can be performed more efficiently by keeping all of the operational expenses in the Center's budget. The County's Employees' Retirement System also undergoes an annual external audit. Similarly, by keeping maintenance costs in the Retirement System's budget, the same efficiencies could be realized. Accordingly, this software maintenance cost should be borne by the Retirement System's administrative expenses budget, which totals \$1.9 million for FY 2017, rather than being

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included in the Office’s budget. Should the Retirement System’s administrative expense budget require additional funding to meet this expense, the Administration could request a budget appropriation transfer to the Contribution-Employees’ Retirement System Program (4102) from the \$1.0 million Reserve for Contingencies General Fund Program (4701) or could request approval of a supplemental appropriation from General Fund Surplus. In such potential events, the need for additional funding would be disclosed, and the County’s modified budget would be documented.

3. Tech Fund – Contingency \$700,000

The proposed FY 2017 budget for Tech Fund initiatives totals \$18.4 million, including \$700,000 for a non-descript contingency line (see Exhibit A on page 11). The Office advised that this line item is for unknown County Executive projects and mandates. Similarly, the FY 2016 Tech Fund budget included a \$720,000 contingency. For FY 2016, the Office advised that the following projects, identified by the Office and approved in FY 2014, FY 2015, and FY 2016, required funds to be used for spending above the original earmark for each project.

Project Name	Fiscal Year	Earmark	Amount
Advantage HRM/FIN/PB Upgrade	FY 2014	\$1,833,000	\$ 93,020
PSAP Update or Replace CAD GUI	FY 2014	276,000	79,350
Advantage Upgrade Phase II	FY 2015	329,000	119,000
SharePoint Initiatives Phase II	FY 2016	854,573	154,670
Operational Excellence - FY16	FY 2016	787,114	240,980
Unify Upgrade	FY 2016	452,092	5,000
Mainframe Migration Planning	FY 2016	527,718	20,261
	Total	<u>\$5,059,497</u>	712,281
	FY 2016 Appropriation		720,000
	Remaining		<u>\$ 7,719</u>

Also, the Council had approved a FY 2016 budget of \$279,000 for the BCPL – Digital Marketing Boards (after a \$441,000 reduction from the proposed FY 2016 budget of \$720,000). Per review of actual FY 2016 expenditures to date as of May 2016, the Office had spent \$342,000 on this project instead of the Council approved \$279,000. Such spending, above the earmark specifically established by the Council, is of concern from a legislative oversight perspective. Should the

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Office require additional funding for unplanned Tech Fund costs, which cannot be covered by the \$7.1 million in unallocated Tech Funds as of May 1, 2016, the Administration could request a budget appropriation transfer from the \$1.0 million Reserve for Contingencies General Fund Program (4701) or it could request approval of a supplemental appropriation from General Fund Surplus for the intended purpose. In such potential events, the need for additional funding would be disclosed, allowing the County Council the opportunity to exercise its legislative oversight and approve or deny the request.

SIGNIFICANT PROGRAM/POLICY INITIATIVES AND/OR CHANGES

4. Personnel Changes \$571,793

The proposed FY 2017 budget includes an increase of \$481,582 in salary costs for 7 (part-time "PT") FY 2016 mid-year additions as follows:

Position	Job Responsibilities	Salary Increase
2 Customer Resource Managers	Responsible for meeting directly with agencies on a regular basis, helping to assess and prioritize agency needs for new technology	\$ 183,090
1 Project Coordinator	Act as a subject matter expert and assist OIT in coordination of special projects	79,923
1 Senior Network Engineer	Provide technical troubleshooting, analysis and repair on all systems related to the Body Worn Camera initiative	83,922
1 Business Intelligence Report Writer/Developer	Use business intelligence and report writing skills to gather, parse, and communicate data gathered as part of the Body Worn Camera initiative	69,546
1 Desktop Technician	Provide technical troubleshooting, analysis and repair on all computer equipment related to the Body Worn Camera initiative	39,593
1 IT Trainee	Provide low level coordination and clerical support for OIT	25,508
Total		<u>\$ 481,582</u>

The proposed FY 2017 budget also includes an increase of \$90,211 in salary costs for the Office's reorganization, which:

- Transfers numerous positions from its 6901 Business Operations and 6902 Applications programs to its 6903 Infrastructure program; and

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- Reclassifies 13 positions: 10 from full-time (FT) to part-time (PT); 2 within PT; and 1 within FT, with related salary increases of \$90,211.

The Office advised that the transfers are to better align positions within the correct technical and management reporting areas and that the reclassifications are to fill operational needs as the County continues to enhance its level of technology. Also, the Office advised that the reclassifications of 10 FT positions to PT positions are not designed to reduce the hours these employees work (or the benefits), but to allow these employees to be removed from the merit pay system and shifted to a “pay for performance” system.

The Office should be prepared to discuss:

- ***The evaluation process it utilizes to identify an operational need for a position to be transferred or reclassified;***
- ***How the reorganization of the Infrastructure Program and the shift to “pay for performance” will improve operations; and***
- ***Future growth needed in positions and/or salaries to support the County’s evolving needs.***

5. FY 2017 Technology Initiatives \$18.4 million (multiple funding sources)

The proposed FY 2017 budget for technology initiatives totals \$18.4 million, which is primarily funded by the County’s General Fund (PAYGO) appropriation to the capital budget totaling \$12.9 million. The PAYGO appropriation reflects an increase of \$4.2 million over the FY 2016 appropriation of \$8.7 million. The Office advised that projects planned for FY 2017 will focus on enhancing functionality of current applications and leveraging new technologies to be more effective and efficient. The Office identified 27 projects that met the aforementioned requirements. Exhibit A (page 11) identifies each proposed project, the primary agency impacted, the budgeted funds, the funding source(s), the applicable initiative(s), and the expected implementation date.

The Office advised that it meets annually with County agencies to identify projects that provide various benefits to the County (e.g., efficiencies, cost savings, fulfillment of mandates, and enhancement of public safety). The Office and the Administration then prioritize projects after

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considering resources and funding to identify the proposed projects for the coming year. The Office then releases an “Efficiencies, Upgrades and Enhancements Report” for the upcoming year that provides the following for each project: description, benefits, expected implementation date, and project category (i.e., innovation (I), efficiency (E), vacancy reduction (VR), consolidation (C), cost savings (S), enhance public safety (EPS), upgrade/enhancement (UE), and enhance public service (Pub Ser) – see Exhibit A below). This annual initiative continues the County Executive’s vision of a more efficient, innovative County government which began in FY 2012 (see Issue #8).

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EXHIBIT A (\$ IN 000s)			FUNDING SOURCES						
Project	Primary Agency	FY 2017 Total Funding	Tech Fund Costs	Police Funding	Equipment Financing	Metro	OIT Gen Fund	Implement Date	Initiative Category
County School Safety Initiative Phase III	BCPS	\$ 4,113	\$ 4,113					3rd Quarter FY 2018	UE, PS
Broadband Fiber Expansion Phase III	BCPS, DHHS, Police, Fire	1,773	1,623		\$ 150			1st Quarter FY 2018	I, E, C, CS, UE
PSAP Telephony Software and Hardware Upgrade	911	1,297	1,297					4th Quarter FY 2017	PS, E, UE
FY17 Opex Initiatives	Various Agencies	1,150	1,150					Ongoing	I, E, VR, C, CS
Metro Finance System Replacement Planning	DPW	872				\$ 872		4th Quarter FY 2017	I, E, CS, UE
Microsoft Enterprise Agreement	Various Agencies	763	669			94		1st Quarter FY 2017	E, CS, UE
OpEx HHS Initiatives Phase II (FY17)	DHHS	727	727					Ongoing	I, E, VR, C, CS
Police Equipment Replacements and Upgrades	Police	724		\$ 724				1st Quarter FY 2018	PS, UE
Security Card Access (FY17)	BCPL	694	99		595			1st Quarter FY 2017	PS, C, E
Accela- Enterprise Inspections Strategic Design	Various Agencies	620	620					2nd Quarter FY 2018	I, E, C, CS
Library CCTV (Phase 2)	BCPL	611	96		515			3rd Quarter FY 2017	PS, C, E, UE
Jail Management System Implementation Phase	Corrections	553	553					3rd Quarter FY 2018	UE, PS
PSAP CAD System Requirements	911, Fire, Police	540		540				4th Quarter FY 2018	PS, C, E, CS, UE
Public Safety Communication System Upgrade Master Plan	911, Fire, Police	537		537				2nd Quarter FY 2017	PS, E, C, UE
BCPL Loaner Device	BCPL	500	500					Ongoing	I, ECE
Infra- Equipment Upgrade PSB	Police	469		469				2nd Quarter FY 2018	UE
SharePoint- Records Management Phase II	Various Agencies	423	326		97			Ongoing	I, E, CS, UE
Infra- Equipment Refresh Video Bail	Police, Corrections	279	126		153			2nd Quarter FY 2016	UE, PS
OpEx DPW Cass Works BPA Phase II (FY17)	DPW	266				266		1st Quarter FY 2018	I, E, C, CS
Police Case Management System	Police	209		209				4th Quarter FY 2018	PS, I, E, UE
Lenel Onguard Upgrade	BCPL	190	163		27			1st Quarter FY 2017	UE
RFID and e-commerce for Owings Mills (FY17)	BCPL	144	9		135			3rd Quarter FY 2017	I, E, UE
Lightbar and Siren Replacement	Police	89		89				1st Quarter FY 2018	PS, UE
eBooking Camera Replacement FY17	Police	80	75				\$5	1st Quarter FY 2018	PS, UE
FoxPro Budget Database Replacement	Police	28	25		3			4th Quarter FY 2017	E, C, UE
Telestaff- Workforce Upgrade for 911	OIT,911	28	23		5			3rd Quarter FY 2017	PS, UE
Update or Replace BarOne in Processing	BCPL	13			13			2nd Quarter FY 2017	E, CS, UE
SUBTOTAL		17,692	12,194	2,568	1,693	1,232	5		
Contingency FY 2017		700	700						
TOTAL		\$18,392	\$12,894	\$2,568	\$ 1,693	\$1,232	\$ 5		

Initiative Category

C=Consolidation CS=Cost Savings E=Efficiency
 ECE=Enhanced Customer Experience I=Innovation PS= Public Safety
 UE=Upgrade/Enhancements VR= Vacancy Reduction

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A description of the projects with significant FY 2017 funding include:

County School Safety Initiative Phase III (\$4.1 million – Tech Fund): Replace card readers at front doors and add additional card readers to other entrances in elementary schools; and replace older security cameras in all middle and high schools. BCPS' Safety and Security Plan totals \$13.5 million and is allocated to the following three phases:

- Phase I - On February 4, 2013, the Council approved Bill 1-13, which appropriated \$2.75 million, and together with an additional \$1.0 million from the Speed Camera Program, provided for a total of \$3.75 million for Phase I initiatives.
- Phase II - On November 3, 2014, the Council approved Bill 62-14, which appropriated \$2.5 million and then during the FY 2016 budget approval process, the Council approved another \$3.2 million for Phase II initiatives.
- Phase III – The proposed FY 2017 budget includes \$4.1 million for Phase III initiatives. The Office advised they are only providing oversight for this phase of the project.

Broadband Fiber Expansion Phase III (\$1.8 million – Tech Fund (\$1.6 million) & Equipment Finance (\$150,000)): Provide broadband services to additional public schools not currently connected to the network, a possible interconnect with Anne Arundel County, and a look forward to develop new backbone pathways which would encourage additional private sector leasing of dark fiber. The Office advised that it is currently generating revenue from the broadband fiber network by leasing dark fiber facilities to private entities and charging facility locate fees in accordance with Miss Utility laws to contractors working within the County. The Office advised that the County has collected \$165,740 in such revenue to date and estimates total revenue in FY 2017 of \$250,000. (See Issue #8 for a discussion of the prior phases of the project).

PSAP-Telephony Software and Hardware Upgrade (\$1.3 million – Tech Fund): Upgrade the telephony, networks, workstations, alarms, monitors, printers, logging recorders etc. at the Emergency Communications Center's (9-1-1) primary and backup locations.

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The proposed 5-year Capital Program (Fiscal Years 2018-2022) includes funding for the following Tech Fund projects:

EXHIBIT B (\$ in 000s)					
Projects	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Accela	\$ 1,000,000	\$ 900,000	\$ 900,000	\$ 918,000	\$ 918,000
Broadband	1,827,000	250,000	250,000	200,000	200,000
Business Process Improvement (Op Ex)	1,732,165	1,462,878	1,120,710	810,721	500,000
Computer-aided dispatch (CAD)	250,000	250,000	255,000	260,100	265,302
New OIT Projects	1,610,000	1,302,499	1,271,972	1,187,878	1,431,335
Police	500,000	692,500	843,322	958,800	1,132,262
Sharepoint	258,100	443,763	589,612	700,016	868,301
Contingency	750,000	900,000	1,080,000	1,296,000	1,684,800
TOTAL	\$ 7,927,265	\$ 6,201,640	\$ 6,310,616	\$ 6,331,515	\$ 7,000,000

The Office should be prepared to discuss:

- ***Whether it meets annually with judicial branch agencies to help them assess their needs;***
- ***How it identifies and compares anticipated and realized project benefits; and***
- ***The reason for the shift to a multi-year funding approach for Tech Fund projects.***

6. Operational Excellence Initiatives

\$1.9 million

The proposed FY 2017 Tech Fund capital budget includes approximately \$1.9 million for operational excellence projects, an increase of approximately \$400,000 over the FY 2016 appropriation of \$1.5 million. The Office advised that these projects are designed to base-line service delivery of specific County operations or programs; recommend business practices to improve efficiency and effectiveness of operations; and implement changes to current practices that provide sustainable, cost-efficient delivery of services.

The Office advised that of the \$1.9 million proposed for FY 2017, \$1.2 million will provide for 6 operational excellence projects, which primarily include: the Police Department (Case Management System), the Fire Department (Fire Inspections), and the Department of Recreation and Parks (Payroll System). The Office also advised that \$727,060 will be used for the Department

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of Health and Human Services to analyze both internal and external business processes of key operations within the Department to base-line current operations against best practices, and to develop concrete action plans tied to the Department's goals and objectives.

For the 16 operational excellence projects approved for FY 2016 (\$1.5 million), the Office advised the project status as: Completed (3), In-Progress (7), and Planned (6). The Office also advised that resources used to perform these projects were/are 90% contractor and 10% in-house resources. For the 7 operational excellence projects proposed for FY 2017 (\$1.9 million), the Office advised of the following contractor/in-house resource allocations: 4 projects (85% contractor/15% in-house), 2 projects (90% contractor/10% in-house), and 1 (75% contractor/25% in-house).

The Office should be prepared to discuss:

- ***How agencies are identified for an operational excellence initiative;***
- ***When the 7 in-progress and 6 planned FY 2016 operational excellence initiatives will be completed; and***
- ***How and when staffing resource (i.e., contractor vs. in-house) decisions are made and to what extent procuring contractors has delayed progress of operational excellence projects.***

7. Maintenance \$449,868

The proposed FY 2017 budget reflects a total of \$449,868 in net increases in software (\$379,316) and equipment (\$70,552) maintenance over the FY 2016 appropriation. The Office identified the following significant changes:

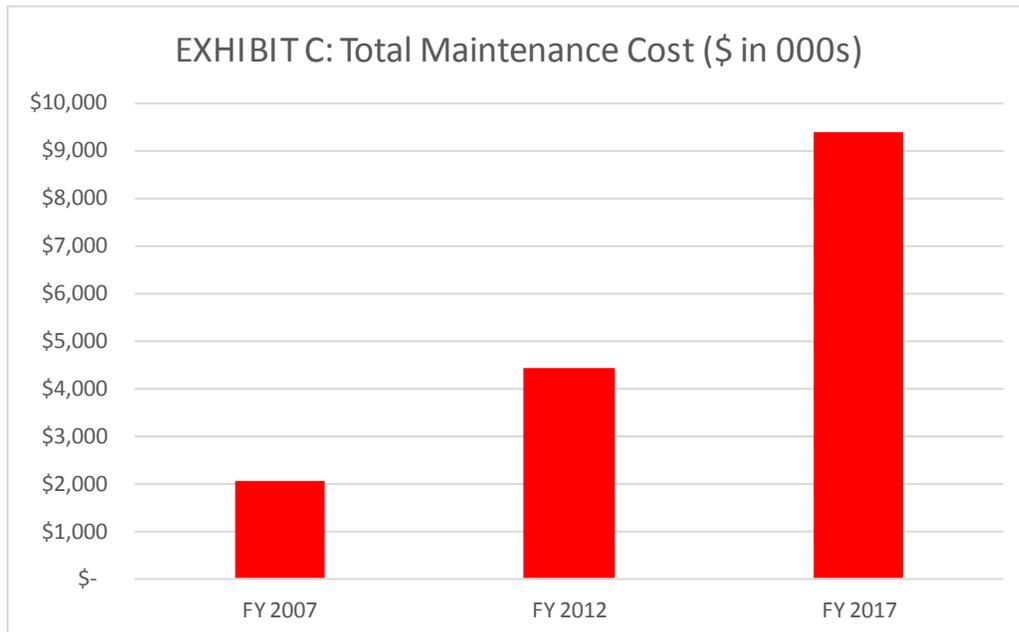
- Microsoft Enterprise Agreement (\$800,000 increase) – The Tech Fund includes \$669,000 (see Issue #5) to implement the third year of a 3-year agreement to standardize information technology across select Microsoft software. In FY 2016 and FY 2015, the Tech Fund included \$1.5 million and \$1.0 million, respectively. The proposed FY 2017 budget shifts \$800,000 of the approximate \$1.5 million cost to the General Fund in preparation for the shift of the entire \$1.5 million to the General Fund for ongoing annual maintenance in FY

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2018.

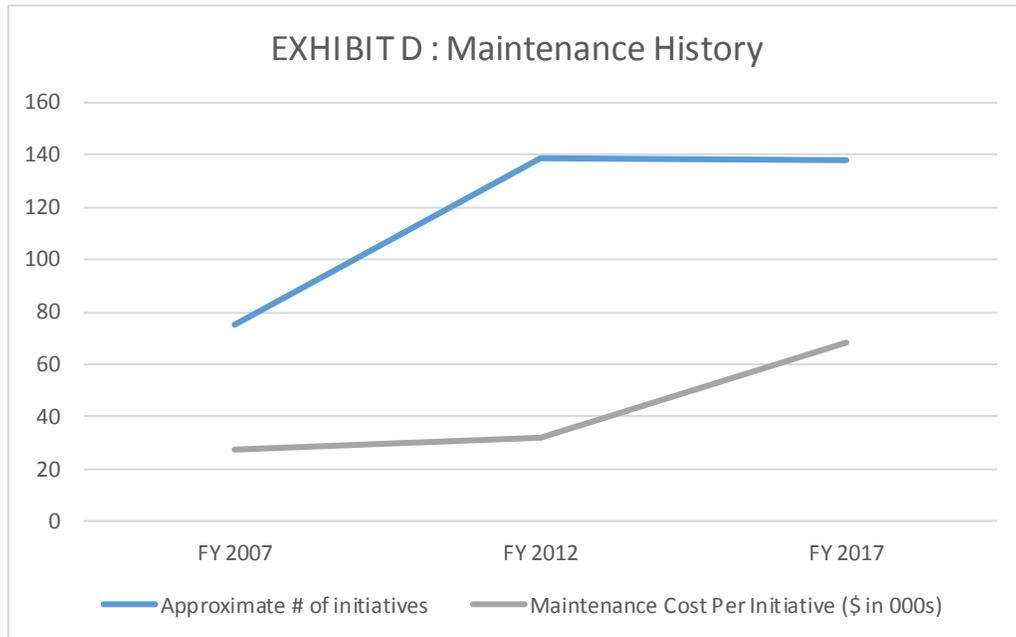
- MUNIS (\$462,968 decrease) - In FY 2014, the Office began implementation of the MUNIS Tax and Cashiering System, which was to replace the outdated tax collection system (OASIS) and cashiering system (RECO). MUNIS is to provide County tax billing, including various municipal fees such as those for water and sewer systems, liens, etc. On December 21, 2015, the Office advised that implementation will be delayed until June 2018. The Office also advised that the funding decrease is because maintenance is not required per the contract for FY 2017.

Exhibit C reflects how maintenance costs have increased from FY 2007 (\$2.0 million) to FY 2017 (proposed budget of \$9.4 million).



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Exhibit D reflects the number of IT initiatives in FY 2007 (75) compared to those proposed in FY 2017 (138) with the corresponding increase in maintenance cost per initiative from FY 2007 (\$27,000) to FY 2017 (\$68,000).



The proposed FY 2017 budget includes \$334,950 (an increase of \$4,950 over the FY 2016 appropriation) for maintenance on the Background Check web-based software platform. Applicants are required to enter the necessary information into the web-based software platform, which then initiates a background check performed by the vendor (Southeastern Security Consultants, Inc.). On May 5, 2014 and May 21, 2015, the Council approved Bill 20-14 and FM-4, respectively, which collectively required background checks of applicants volunteering (approximately 24,000) at sanctioned recreation council programs to be provided by Southeastern Security Consultants, Inc. The Office advised that in July 2016, this initiative was successfully implemented without any unforeseen challenges.

The Office should be prepared to discuss:

- ***Whether annual maintenance is included in the cost/benefit analysis performed for each proposed IT initiative;***

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- *Future General Fund impacts (e.g., maintenance costs) of projects currently funded by the Tech Fund; and*
- *Why the MUNIS contract was amended so that maintenance was not required for FY 2017.*

OTHER ISSUES:

8. Technology Initiatives – Prior Years

In FY 2012, the County identified 23 County initiatives to meet the County Executive's vision of a more efficient, innovative County Government. Total funding for these initiatives was \$90.8 million and, to date, all initiatives have been implemented. At the time the Administration advised that it expected the County to recoup its \$5 million investment in implementation costs within 3 to 5 years, with on-going savings projected into the future. The Office's FY 2015 and FY 2016 Tech Fund budgets totaled \$11.1 million for 20 initiatives (7 implemented) and \$16.6 million for 19 initiatives (1 implemented), respectively. Exhibit E summarizes the applicable government area and the total funding (FY 2012, 2015, and 2016) for these initiatives, followed by a discussion of the significant projects included in the exhibit:

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Exhibit E (\$ IN 000s)*			FUNDING SOURCES							
Government Classification	# of Initiatives	Total Funding	Public Safety Capital	Tech Fund Costs	Grant	Metro District	Agency-General Fund	Equip Financing	Police Funding	OIT Gen Fund
Implemented Initiatives										
Public Safety	8	\$ 60,415	\$ 56,361	\$ 2,057	\$ 1,380		\$ 201	\$ 410		\$ 6
General Government	15	31,778	1,577	9,857	14,879	\$ 162	3,603	1,661		39
DPW	1	1,386				1,386				
Health & Human Services (DHHS)	5	1,841		1,580	78		76	107		
Culture and Leisure Services	2	79		79						
Contingency		970		970						
Total Implemented	31	96,469	57,938	14,543	16,337	1,548	3,880	2,178	-	45
In-Progress Initiatives										
General Government	16	9,352		8,780		249		281		42
Public Safety	7	1,660		985				60	\$ 615	
Health & Human Services (DHHS)	2	1,394		1,394						
DPW	2	2,730				2,730				
Culture and Leisure Services	2	1,164		914				250		
Education	2	5,693		5,693						
Total In-Progress	31	21,993		17,766		2,979		591	615	42
Total Initiatives	62	\$ 118,462	\$ 57,938	\$ 32,309	\$ 16,337	\$ 4,527	\$ 3,880	\$ 2,769	\$ 615	\$ 87

* Exhibit excludes FY 2013 (\$5.0 million) and FY 2014 (\$6.7 million) Tech Fund projects (see Exhibit 1)

Public Safety - P25 National Standard Digital Radio System total funding of \$57.4 million: Upgraded the County's analog radio transmission system to a digital system, which allowed for interoperability with other regions/State and expanded coverage and improved communication quality.

General Government - Broadband Fiber total funding of \$21.9 million (Initial Phase (FY 2012 of \$18.5 million); Phase I (FY 2015 of \$1.8 million); Phase II (FY 2016 of \$1.6 million)): Over the course of this initiative, the Office has installed more than 160 miles of fiber optic communication network throughout the County, including schools, libraries, and other government facilities while eliminating charges paid to 3rd party Internet Service Providers.

During FY 2016, the Office purchased \$1.0 million in equipment (e.g., radios and mobile laptops, network equipment, VOIP hardware and software, and a radio console for the 9-1-1 back-up center) using funds from the County's 2012 Equipment Financing Package.

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The Administration should be prepared to discuss:

- ***Whether the County has recouped its \$5 million investment in implementation costs from the initial 23 technology initiatives; and***
- ***How much the County expects to recoup from the additional 39 initiatives.***

9. Online Services

The County's website is highly regarded and has received multiple awards. The Center for Digital Government states that the "best government websites tend to use simple, high image, low text designs; prioritize accessibility and mobility; prominently feature a search function; and start with a design philosophy that puts the user first." In October 2015, The Center for Digital Government ranked the County's website in 2nd place for its 2015 "Best of the Web" award in the county portal category.

The Office should be prepared to discuss the ongoing associated costs of maintaining a strong online presence and any plans for enhancements.

10. Outsourced IT Systems

During FY 2016, the Office continued its initiative to evaluate the costs and benefits of maintaining IT systems in-house or having them maintained by a vendor in the cloud (i.e., an externally hosted system). Externally hosted IT systems provide various benefits, including cost savings because fewer personnel and equipment are required to support an IT system. However, various risks also exist including the vendor's ability to provide an IT system that is secure, available when needed by users, maintains processing integrity (i.e., processes transactions accurately and completely), ensures data privacy, etc. The Office manages these risks via vendor contracts, which include specific terms and vendor requirements to protect the County and its information.

The Office advised that it is currently responsible for 303 IT systems, and of these, 3 systems are externally hosted:

- Neogov Job Recruitment System (\$57,652 – maintenance cost): A system to track and fill positions in the County. Agencies submit job requisitions electronically and the Office

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of Human Resources posts them onto the web. Applicants apply for jobs online and applications are routed electronically to the hiring agency.

- MUNIS (\$0– maintenance cost): See issue #7
- Emphasys (\$99,492 (Department of Housing - Grant 21 funded)): Licensing fees and vendor hosting fees.

The Office should be prepared to discuss:

- ***Criteria used to determine whether an IT system should be maintained in-house or externally hosted; and***
- ***The potential cost savings for having these IT systems externally hosted.***

IT PROJECTS FROM OTHER BUDGET HEARINGS:

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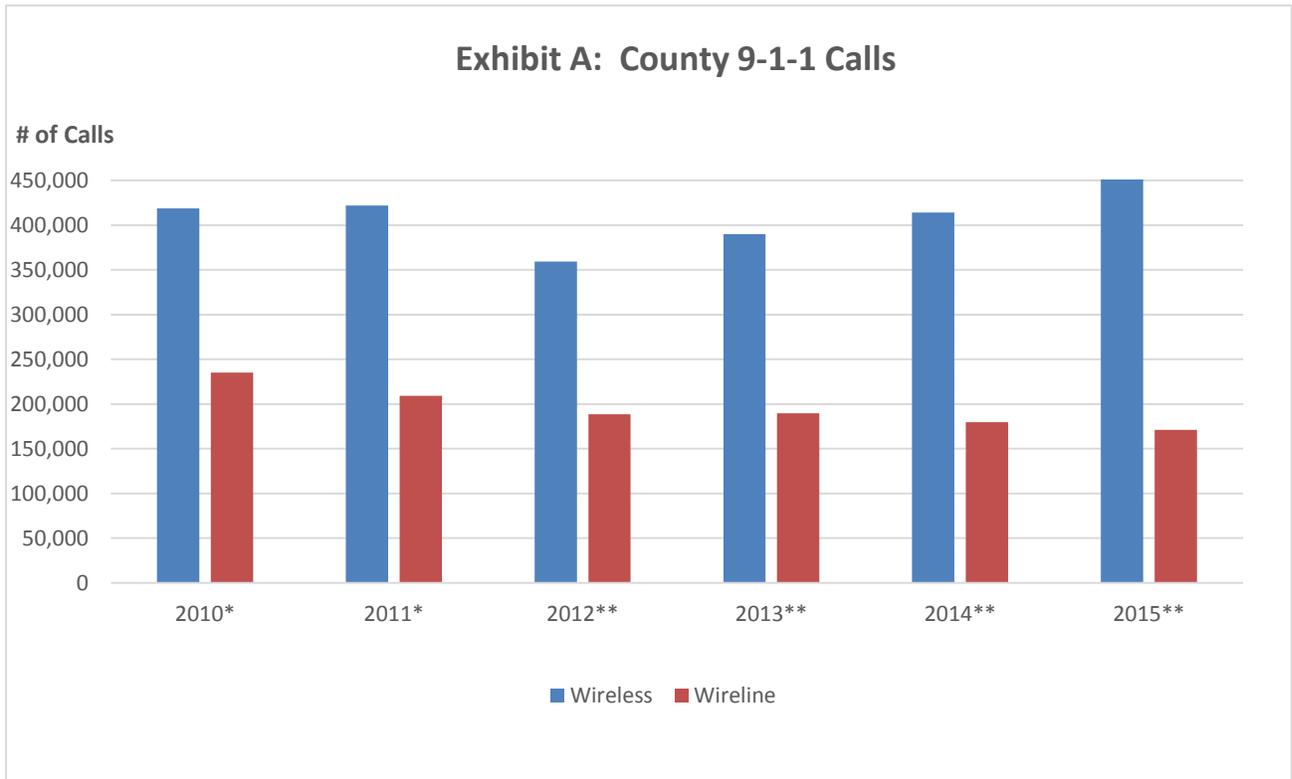
technologies are collectively referred to as “Next Generation 9-1-1.” In addition to the benefits of expanded data capabilities provided to callers, Next Generation 9-1-1 technologies also offer first responders the ability to assess (and respond to) an emergency before arriving on the scene.

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 Office 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.***

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2. PAI - Technology Projects

The proposed FY 2017 budget includes approximately \$327,000 in ongoing support and maintenance costs for the Accela Permits, Inspections, and Licensing Project and the Accela Land Management Application. Both projects were implemented during FY 2012 and cost approximately \$2.5 million.

The Accela Permits, Inspections, and Licensing software allows for automation of certain Department processes and centralizes the data for building, electrical, plumbing and miscellaneous permits. The software additionally provides limited public online access, allowing County residents to file for permits electronically. Further, the software allows code enforcement inspectors field access, enabling inspectors to increase their workload by eliminating the need for return trips to hand file records each day. The Department advised that Accela has reduced the number of paper applications and decreased processing turnaround time from 8-10 weeks to 2-3 weeks. Beginning May 1, 2016, County residents will be able to upload rabies vaccination certificates into the system, eliminating the need to file by mail or in person.

The Accela Land Management Application integrates with the Permits, Inspections, and Licensing software to coordinate and track the subdivision and development review and approval processes. This application provides for limited public online access, allowing residents to track the status of a proposed development. The Department advised that the application has increased certain response times for phase one of the development review process and has reduced the number of phone calls and emails to the Department. However, the Department further advised that it still must rely on other data systems since not all Development Management processes are integrated with Accela.

On March 23, 2016, Harford County launched an “ePERMIT CENTER” allowing citizens 24/7 access to numerous permits and inspections-related services. Citizens are able to search for a residential, commercial, or miscellaneous permit by permit number or address, tracking it from request to completion. Further, citizens are able to track the real-time status of inspection requests and search the progress of a proposed development plan. Harford County’s costs for this technology initiative totaled \$2.1 million in one-time expense, with the related annual support and

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maintenance fees totaling \$226,000.

The Department advised that the Office of Information Technology tentatively plans to expand the Accela software applications in FY 2018, which will enhance public access, integrate building permitting application data, and provide further Development Management phase capabilities.

The Office should be prepared to discuss:

- ***The limitations and challenges associated with needing to utilize multiple programs and databases for Departmental processes;***
- ***How much additional access and capability the public will experience with the expansion of the Accela software applications;***
- ***When building permitting applications and all Development Management processes will be integrated with Accela;***
- ***How Departmental operations will be improved through an expansion of the software; and***
- ***The accuracy and level of detail that is currently publicly available online relating to development plan applications and reviews.***

BALTIMORE COUNTY
FISCAL YEAR 2017 RECOMMENDED BUDGET

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APPROPRIATION DETAIL

		2015 <u>ACTUAL</u>	2016 <u>APPROP</u>	2017 <u>REQUEST</u>	<u>NET CHANGE</u>	
					<u>AMOUNT</u>	<u>%</u>
<u>Agency 069</u>						
6901	General Administration	\$2,713,915	\$ 2,965,188	\$ 2,648,816	\$ (316,372)	-10.7%
6902	Applications	7,375,642	8,928,212	8,549,479	(378,733)	-4.2%
6903	Infrastructure	10,389,226	10,801,469	13,025,627	2,224,158	20.6%
6904	Electronic Services	<u>3,253,870</u>	<u>3,268,549</u>	<u>3,325,334</u>	<u>56,785</u>	<u>1.7%</u>
	Total	<u>\$ 23,732,653</u>	<u>\$ 25,963,418</u>	<u>\$ 27,549,256</u>	<u>\$ 1,585,838</u>	<u>6.1%</u>

BALTIMORE COUNTY
FISCAL YEAR 2017 RECOMMENDED BUDGET

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PERSONNEL DETAIL

	FY 2015 ACTUAL		FY 2016 APPROP		FY 2017 REQUEST		NET CHANGE		
	FULL	PART	FULL	PART	FULL	PART	FULL	PART	
<u>Agency 069</u>									
6901	General Administration	15	14	13	20	12	17	(1)	(3)
6902	Applications	34	26	26	37	12	45	(14)	8
6903	Infrastructure	47	46	31	60	36	72	5	12
6904	Electronic Services	19	3	20	2	20	2	0	0
	Total *	115	89	90	119	80	136	(10)	17

* - Excludes positions from Central Printing Services (Program 6910), which operates as an internal service fund.