



# THE PRINCE GEORGE'S COUNTY GOVERNMENT

## Office of Audits and Investigations

April 13, 2017

### MEMORANDUM

TO: Dannielle M. Glaros, Chair  
Public Safety and Fiscal Management (PSFM)

THRU: David H. Van Dyke, County Auditor *DEN*

FROM: Mukund Agashe, Staff Auditor *MA*

RE: Office of Information Technology (OIT)  
Fiscal Year 2018 Budget Review

#### Budget Overview

The FY 2018 Proposed Budget for the Office of Information Technology is \$37,397,100, an increase of \$6.2 million, or 19.9%, over the FY 2017 Approved Budget. The increase is largely due to funding Phase I of a countywide computer refresh. The Office's expenditures are primarily funded by office automation charges and other revenues in the Information Technology Internal Service Fund. A General Fund transfer of \$556,300 is also anticipated for FY 2018.

#### Budget Comparison – Information Technology Internal Service Fund (IS39)

Approved Fiscal Year 2017 to Proposed Fiscal Year 2018

| Category           | FY 2016<br>Actual    | FY 2017<br>Approved  | FY 2017<br>Estimate  | % Change -<br>Est vs App | FY 2018<br>Proposed  | \$<br>Change        | %<br>Change  |
|--------------------|----------------------|----------------------|----------------------|--------------------------|----------------------|---------------------|--------------|
| Compensation       | \$ 5,784,555         | \$ 6,408,300         | \$ 5,176,600         | -19.2%                   | \$ 6,291,600         | \$ (116,700)        | -1.8%        |
| Fringe Benefits    | 4,322,789            | 4,357,600            | 3,882,500            | -10.9%                   | 4,631,500            | 273,900             | 6.3%         |
| Operating Expenses | 19,068,000           | 20,420,200           | 18,950,800           | -7.2%                    | 22,474,000           | 2,053,800           | 10.1%        |
| Capital Outlay     | 510,144              | -                    | -                    | -                        | 4,000,000            | 4,000,000           | N/A          |
| <b>Total</b>       | <b>\$ 29,685,488</b> | <b>\$ 31,186,100</b> | <b>\$ 28,009,900</b> | <b>-10.2%</b>            | <b>\$ 37,397,100</b> | <b>\$ 6,211,000</b> | <b>19.9%</b> |

Authorized Staffing Count - Information Technology Fund

|              | FY 2017 Approved | FY 2018 Proposed | Change Amount | Percentage Change |
|--------------|------------------|------------------|---------------|-------------------|
| Full-Time    | 69               | 70               | 1             | 1.4%              |
| Part-Time    | 0                | 4                | 4             | N/A               |
| <b>Total</b> | <b>69</b>        | <b>74</b>        | <b>5</b>      | <b>7.2%</b>       |

**Revenue Sources**

- Funding for the Office is generated from the following sources:
  - Office Automation Charges \$21,069,700
  - Use of I-Net Fund Balance 8,430,600
  - I-Net Receipts 7,000,000
  - General Fund Transfer 556,300
  - Agency Charges – GIS 340,500
  - Total \$37,397,100**
- Office Automation Charges: OIT charges each agency a “fixed-charge” per year to provide information technology services. Technology costs are shared by all agencies based on the percentage of users. Proposed office automation charges for FY 2018 are at the same level as the Approved FY 2017 Budget. (For a detailed list of charges by agency, see Attachment A).
- I-Net Receipts: Part of the Public, Educational, and Government Access Channels (PEG) fees collected by Comcast and Verizon to operate I-Net.
- Agency Charges - GIS: For Geographic Information Systems (GIS) services provided to the Maryland-National Capital Park and Planning Commission (budgeted as a project charge to the M-NCPPC).

**Staffing Changes and Compensation**

- Information Technology Internal Service (IS39) funds are provided for 70 full-time positions, an increase of one position, over the FY 2017 approved level. The Office plans to fill the new position, a Deputy Director position, by the end of FY 2018. In addition, funding is provided for four (4) new part-time General Clerk positions in the Proposed FY 2018 Budget. Two (2) Information Technology Engineer 4G positions will be funded through the Capital Improvement Program (CIP) for the Enterprise Resource Planning (ERP) project.
- In addition to the 70 full-time positions, OIT staff includes 91 contract positions. (See page 6 of the responses to the First Round Questions for details of the outsourced positions.)
- As of March 2017, the Office reported nine (9) vacant positions. Two (2) vacant positions will be funded from the CIP budget, five (5) vacancies will be funded from the Information Technology Fund, and two (2) vacancies will not be funded in FY 2018.



### **Fringe Benefits**

- Fringe benefits are proposed to increase by \$273,900, or 6.3%, over the FY 2017 approved level due to the increase in compensation for the new positions.
- A five-year trend analysis of fringe benefit expenditures is included below.

| <b>Fringe Benefits Historical Trend</b> |                           |                           |                           |                              |                             |
|-----------------------------------------|---------------------------|---------------------------|---------------------------|------------------------------|-----------------------------|
|                                         | <b>FY 2014<br/>Actual</b> | <b>FY 2015<br/>Actual</b> | <b>FY 2016<br/>Actual</b> | <b>FY 2017<br/>Estimated</b> | <b>FY 2018<br/>Proposed</b> |
| Fringe Benefits                         | \$4,084,960               | \$4,042,830               | \$4,322,789               | \$3,882,500                  | \$4,631,500                 |
| As a % of Compensation                  | 67.9%                     | 65.8%                     | 74.7%                     | 75.0%                        | 73.6%                       |
| Annual % Change                         |                           | -1.0%                     | 6.9%                      | -10.2%                       | 19.3%                       |

### **Operating Expenses**

- In FY 2018, total operating expenses are proposed at \$22.5 million, an increase of \$2,053,800, or 10.1%, over the approved FY 2017 level.
- The accompanying table compares the FY 2018 Proposed Budget operating expenditures with the FY 2017 Approved Budget operating expenditures. In nine (9) of the categories, the FY 2018 Proposed Budget increases planned spending over the FY 2017 budget. In two (2) of the categories, the FY 2018 Proposed Budget level remains unchanged compared to the FY 2017 budget. FY 2018 expenditures decrease in six (6) categories.

| <b>Operating Objects</b>             | <b>FY 2017<br/>Budget</b> | <b>FY 2018<br/>Proposed</b> | <b>FY 2017 - FY 2018</b> |                     |
|--------------------------------------|---------------------------|-----------------------------|--------------------------|---------------------|
|                                      |                           |                             | <b>\$<br/>Change</b>     | <b>%<br/>Change</b> |
| Operational Contracts                | \$ 2,842,400              | \$ 7,419,500                | \$ 4,577,100             | 161.0%              |
| Operating Equipment Non-Capital      | 10,834,400                | 11,719,700                  | 885,300                  | 8.2%                |
| Data-Voice                           | 120,000                   | 154,200                     | 34,200                   | 28.5%               |
| Training                             | 20,000                    | 42,600                      | 22,600                   | 113.0%              |
| Allowances                           | 1,200                     | 14,400                      | 13,200                   | 1100.0%             |
| Operating and Office Supplies        | 35,000                    | 42,800                      | 7,800                    | 22.3%               |
| Membership Fees                      | 2,500                     | 5,000                       | 2,500                    | 100.0%              |
| Printing                             | -                         | 500                         | 500                      | N/A                 |
| Vehicle Equipment Repair/Maintenance | 34,500                    | 34,800                      | 300                      | 0.9%                |
| Local Transportation                 | 800                       | 800                         | -                        | 0.0%                |
| Equipment Lease                      | 70,000                    | 70,000                      | -                        | 0.0%                |
| Telephone                            | 202,900                   | 202,600                     | (300)                    | -0.1%               |
| Periodicals                          | 500                       | -                           | (500)                    | -100.0%             |
| Vehicle Gas and Oil                  | 5,000                     | 2,700                       | (2,300)                  | -46.0%              |
| Interagency Charges                  | 91,900                    | 88,400                      | (3,500)                  | -3.8%               |
| Travel:Non-Training                  | 10,000                    | 2,000                       | (8,000)                  | -80.0%              |
| General & Administrative Contracts   | 6,149,100                 | 2,674,000                   | (3,475,100)              | -56.5%              |
| <b>TOTAL</b>                         | <b>\$ 20,420,200</b>      | <b>\$ 22,474,000</b>        | <b>\$ 2,053,800</b>      | <b>10.1%</b>        |

- The most significant dollar increase between the FY 2018 Proposed Budget and the FY 2017 Approved Budget is in Operational Contracts (\$4.6 million increase), largely due to a shift from General & Administrative Contracts to Operational Contracts, as well as County-wide requirements for further IT-related infrastructure and services.
- The most significant dollar reduction between the FY 2018 Proposed Budget and the FY 2017 Approved Budget is in General and Administrative Contracts (\$3.5 million decrease), due to shifting several General & Administrative Contracts to Operating Contracts to better align with operational activities.
- FY 2018 Operating expenses are comprised of the following major items:
  - Operating Equipment Non-Capital (\$11.7 million), which includes:
    - Enterprise Software Agreement (\$2.0 million);
    - County Equipment – Upgrade/Fix, Network Maintenance – (\$1.6 million);
    - Replace out of Support Network Equipment (\$1.1 million);
    - Maintenance on Avaya telephone system (\$525,000).
  - General and Administrative Contracts (\$2.7 million), which includes:
    - Administrative and Technical Staff Augmentation (\$868,800);
    - Governance Staff Augmentation Task Order Proposal Request (TOPR) (\$454,000);
    - Staff Augmentation and Summer Youth Enrichment Program (\$350,000);
    - Telecommunications Transmission Facility Coordinating Committee (TTFCC) Consulting Support (\$341,000)
  - Operational Contracts: (\$7.4 million), which includes:
    - Managed Services (\$1.9 million)
    - I-Net Team – Staffing for I-Net Program (\$1.6 million)
    - Mainframe Data Center (\$1.5 million)
- The Proposed FY 2018 beginning fund balance for the Information Technology Internal Service Fund is \$144,893. In FY 2018, net use of fund balance in the amount \$8.4 million is proposed, leaving an ending fund balance of negative \$8,285,707. The Office reports that increased General Fund contributions over several years will be necessary to reduce the deficit in the fund balance. (See Attachment B – Fund Operating Summary)

### **Highlights**

- The Office reported the following key accomplishments for FY 2017:
  - Performed successful SAP system upgrade to the latest SAP patches and software versions enabling the County to maintain Federal and State tax regulatory compliancy.
  - Deployed various in-house applications. Some of the applications include:
    - Healthy Prince George's: This mobile application provides users with healthy options for eating and exercising in Prince George's County. Users can also search for County hospitals, local farms, farmers market, parks etc. in the County.

- Human Relations Commission Case Management System: An internal application designed to receive and investigate complaints for the Commission related to the discrimination in Housing, Employment, Law Enforcement, etc.
- Health Information & Kiosk Education (HIKE): A system that makes it easy for residents to access current information on County health resources and health care services. HIKE kiosks are located throughout the County.
- Updated the Security Awareness Course to ensure compliance with International Organization for Standardization 27001 (ISO 27001).
- Implemented countywide Digital Signage technology to deliver visual content targeted to specific audiences in locations throughout designated County buildings.
- OIT reported that it worked to bring the Pathways in Technology Early College High Schools (P-TECH) program, aimed at improving technology education in disadvantaged areas, to the County. As a result, Prince George's County received two of the six schools awarded funding under MD Senate Bill 376. One of the schools will be co-located in Frederick Douglass High School and is in the process of accepting 75 students for school year 2017-2018. Another school will be introduced in school year 2018-2019 and will accept another 75 students. Prince George's County Public Schools is receiving funding from State of Maryland to support the schools.
- The Office reported the following initiatives for FY 2018:
  - Countywide Computer Refresh – The Office plans to conduct a phased computer refresh beginning in FY 2018. Funding in the amount of \$4 million has been included in the FY 2018 budget to purchase approximately 2,500 laptops, as well as related software and services.
  - Enterprise Resource Planning (ERP) – A \$73.7 million multiyear project funded through the Capital Improvement Program (CIP). The proposed CIP represents a net increase of \$4 million for this project compared to the previous fiscal year. A summary of the implementation cost by fiscal year, as reported in the CIP Budget, is provided on the following page. Details of the proposed \$73.7 million total project costs are provided in the responses to the First Round Questions.



| FY    | Total Project Cost | Increase (Decrease) | Total Expended (to date)** | Estimated Completion Date |
|-------|--------------------|---------------------|----------------------------|---------------------------|
| 2008* | \$ 6,000,000       | N/A                 | N/A                        | June-10                   |
| 2009* | \$ 7,300,000       | \$ 1,300,000        | N/A                        | June-10                   |
| 2010* | \$ 5,600,000       | \$ (1,700,000)      | N/A                        | June-10                   |
| 2011* | \$ 15,200,000      | \$ 9,600,000        | N/A                        | June-13                   |
| 2012* | \$ 2,600,000       | \$ (12,600,000)     | N/A                        | June-17                   |
| 2013* | \$ 2,600,000       | \$ -                | \$ 784,573                 | June-17                   |
| 2014  | \$ 42,336,000      | \$ 39,736,000       | \$ 19,182,835              | October-16                |
| 2015  | \$ 53,974,000      | \$ 11,638,000       | \$ 33,671,678              | October-16                |
| 2016  | \$ 61,974,000      | \$ 8,000,000        | \$ 42,041,181              | October-16                |
| 2017  | \$ 69,653,000      | \$ 7,679,000        | \$ 57,790,381              | October-16                |
| 2018  | \$ 72,742,000      | \$ 3,089,000        | \$ 72,742,681              | June-19                   |
| 2019  | \$ 73,742,000      | \$ 1,000,000        | \$ 73,742,681              | June-19                   |

\*Originally included as a project in the Office of Central Services' Capital Improvement Program as the *Administrative Information Systems* project.

\*\*Total Expended is the cumulative project costs as of the end of the fiscal year. FY 2017 and FY 2018 Total Expended is an estimate per Attachment 4 of the 1st Round responses.

- The Wave 4 implementation of SAP previously included Tax and Revenue Management (TRM), however this module has been removed from the scope of the ERP project as the implementation vendor does not have enough experience with that particular module. Funding in the amount of \$7.6 million was included in the FY 2017 approved budget for the TRM. The cost to implement TRM is not currently included in the proposed \$73.7 million total project cost. The scope and estimated cost for implementation of this module have yet to be determined.
- The first SAP module Wave 1 went live in July 2014 and included Financial Accounting and Reporting, Asset and Inventory Management, and Grant Management. The second SAP module, which went live in FY 2016, concentrated primarily on Personnel and Benefits Administration, Employee and Manager Self-Service, and Payroll. Pension Gold (Wave 3A), which went live in June 2016, produces retiree payments. The SAP Budget Planning (SBP) module, formerly known as Public Budget Formulation, is expected to go live in May 2017.
- The estimated implementation start and end dates for the remaining SAP modules is as follows:

| Phases | Implementation |          | Modules Included                             |
|--------|----------------|----------|----------------------------------------------|
|        | Start Date     | End Date |                                              |
| Wave 3 | Sep-15         | Aug-17   | Public Budget Formulation                    |
| Wave 3 | May-17         | Mar-18   | Performance and Learning Solution Management |
| Wave 3 | Feb-17         | Feb-18   | Treasury and Debt Management                 |
| Wave 3 | May-17         | May-18   | Work Order Management                        |

- Details of the measurable accomplishments recognized by implementing SAP is available on Page 3 of the responses to Second Round Questions.
- Time & Attendance (ETS) Program: In FY 2019, Microsoft will end support for Windows Server 2008, the platform which runs ETS. The ETS software system must be replaced prior to the end of the Windows Server 2008 lifecycle. The new system is estimated to cost \$5 million to include software, services, and hardware and/or hosting requirements. Current plans are to finance the system via a Certificate of Participation. The project is estimated to start by summer 2017 and to conclude by July 2019.
- Office Automation Charges: OIT acquired VMWare's IT Business Management (ITBM) suite to measure usage of IT services by various County Agencies. The Office is currently in the first year of the showback phase (making agencies aware of the costs involved in providing IT services) and expects to continue for two cycles. During the showback phase, OIT will analyze what the new charge back structure should look like.
- The Office reported that it faces several critical issues/decisions beyond FY 2018, including:
  - Aging Infrastructure:
    - Servers and switches throughout the County are coming to or are at the end of life and will need to be refreshed.
    - Desktops/Laptops – These computers are end of support and needs to be refreshed. Windows 7 will also be at the end of support in 2020 and computers will need to be migrated to Windows 10.
  - Storage Solutions for Videos
  - OIT is currently moving the old data to the data warehouse and plans to retire the mainframe system within four years.

Attachments: Attachment A – Office Automation Charges by Agency  
Attachment B – Information Technology Internal Service Fund

**OFFICE OF INFORMATION TECHNOLOGY (OIT)**  
**OFFICE AUTOMATION CHARGES**

| <b>Agency/Branch</b>                   | <b>Approved<br/>FY 2017</b> | <b>Proposed<br/>FY 2018</b> | <b>\$ Increase/<br/>(Decrease)</b> | <b>% Change</b> |
|----------------------------------------|-----------------------------|-----------------------------|------------------------------------|-----------------|
| Board of License Commissioners         | 22,400                      | 22,400                      | -                                  | 0.00%           |
| CCOP                                   | 12,800                      | 12,800                      | -                                  | 0.00%           |
| Central Services                       | 582,900                     | 582,900                     | -                                  | 0.00%           |
| Circuit Court                          | 903,100                     | 903,100                     | -                                  | 0.00%           |
| Community Relations                    | 119,500                     | 119,500                     | -                                  | 0.00%           |
| County Council                         | 384,400                     | 384,400                     | -                                  | 0.00%           |
| County Executive                       | 82,100                      | 82,100                      | -                                  | 0.00%           |
| Corrections                            | 1,285,600                   | 1,285,600                   | -                                  | 0.00%           |
| DoE                                    | 1,094,600                   | 1,094,600                   | -                                  | 0.00%           |
| DPIE                                   | 1,026,700                   | 1,026,700                   | -                                  | 0.00%           |
| DPW&T                                  | 945,500                     | 945,500                     | -                                  | 0.00%           |
| Elections                              | 149,200                     | 149,200                     | -                                  | 0.00%           |
| Family Services                        | 239,700                     | 239,700                     | -                                  | 0.00%           |
| Finance                                | 456,700                     | 456,700                     | -                                  | 0.00%           |
| Fire and Volunteer Fire                | 2,771,800                   | 2,771,800                   | -                                  | 0.00%           |
| Health                                 | 1,773,600                   | 1,773,600                   | -                                  | 0.00%           |
| Homeland Security                      | 159,500                     | 159,500                     | -                                  | 0.00%           |
| Housing & Community Development        | 66,900                      | 66,900                      | -                                  | 0.00%           |
| Office of Ethics and Accountability    | 4,100                       | 4,100                       | -                                  | 0.00%           |
| Office of Law                          | 199,400                     | 199,400                     | -                                  | 0.00%           |
| OHRM                                   | 453,000                     | 453,000                     | -                                  | 0.00%           |
| OMB                                    | 114,100                     | 114,100                     | -                                  | 0.00%           |
| Orphan's Court                         | 8,400                       | 8,400                       | -                                  | 0.00%           |
| Personnel Board                        | 6,300                       | 6,300                       | -                                  | 0.00%           |
| Police                                 | 6,348,700                   | 6,348,700                   | -                                  | 0.00%           |
| Sheriff                                | 951,800                     | 951,800                     | -                                  | 0.00%           |
| Social Services                        | 10,000                      | 10,000                      | -                                  | 0.00%           |
| Soil Conservation                      | 9,600                       | 9,600                       | -                                  | 0.00%           |
| State's Attorney                       | 867,300                     | 867,300                     | -                                  | 0.00%           |
| Economic Development Corporation (MOU) | 20,000                      | 20,000                      | -                                  | 0.00%           |
| <b>TOTAL</b>                           | <b>21,069,700</b>           | <b>21,069,700</b>           | <b>-</b>                           | <b>0.00%</b>    |



**OFFICE OF INFORMATION TECHNOLOGY (OIT)**  
**INFORMATION TECHNOLOGY INTERNAL SERVICE FUND - IS39**  
**FUND OPERATING SUMMARY**

| Description                       | FY 2017<br>Budget    | FY 2017<br>Estimated | FY 2018<br>Proposed   | Dollar<br>Change      | Percentage<br>Change |
|-----------------------------------|----------------------|----------------------|-----------------------|-----------------------|----------------------|
| <b>Revenues:</b>                  |                      |                      |                       |                       |                      |
| Agency Charges                    | \$ 21,069,700        | \$ 20,242,600        | \$ 21,069,700         | -                     | 0.0%                 |
| I-Net Receipts                    | 6,500,000            | 6,500,000            | 7,000,000             | 500,000               | 7.7%                 |
| I-Net Fund Balance                | 3,275,900            | 2,500,000            | 8,430,600             | 5,154,700             | 157.4%               |
| Agency Charges - GIS              | 340,500              | 340,500              | 340,500               | -                     | 0.0%                 |
| General Fund Transfers            | -                    | -                    | 556,300               | 556,300               | N/A                  |
| <b>Total Revenues</b>             | <u>\$ 31,186,100</u> | <u>\$ 29,583,100</u> | <u>\$ 37,397,100</u>  | <u>\$ 6,211,000</u>   | 19.9%                |
| <b>Expenditures:</b>              |                      |                      |                       |                       |                      |
| Compensation                      | \$ 6,408,300         | \$ 5,176,600         | \$ 6,291,600          | \$ (116,700)          | -1.8%                |
| Fringe Benefits                   | 4,357,600            | 3,882,500            | 4,631,500             | 273,900               | 6.3%                 |
| Operating Expenses                | 20,420,200           | 18,950,800           | 22,474,000            | 2,053,800             | 10.1%                |
| Capital Outlay                    | -                    | -                    | 4,000,000             | 4,000,000             | N/A                  |
| <b>Total Expenditures</b>         | <u>\$ 31,186,100</u> | <u>\$ 28,009,900</u> | <u>\$ 37,397,100</u>  | <u>\$ 6,211,000</u>   | 19.9%                |
| Beginning Fund Balance            | \$ 2,489,821         | \$ 1,071,692         | \$ 144,892            | \$ (2,344,929)        | -94.2%               |
| Excess Revenues over Expenditures | \$ -                 | \$ 1,573,200         | \$ -                  | \$ -                  | N/A                  |
| Fund Bal. Appropriated            | <u>(3,275,900)</u>   | <u>(2,500,000)</u>   | <u>(8,430,600)</u>    | <u>(5,154,700)</u>    | 157.4%               |
| <b>Ending Fund Balance</b>        | <u>\$ (786,079)</u>  | <u>\$ 144,892</u>    | <u>\$ (8,285,708)</u> | <u>\$ (7,499,629)</u> | 954.1%               |