

October 23, 2018

TO: Montgomery County Planning Board Prince George's County Planning Board

FROM: Mazen Chilet, Chief Information Officer C

SUBJECT: FY20 Proposed Budget for the Office of the Chief Information Officer (CIO)

Staff Recommendation

Approval to prepare the FY20 Office of the Chief Information Officer (OCIO) operating and project budgets at the Base Budget plus New Initiatives level.

Background

The CIO reports to the Executive Committee to ensure Commission-wide focus on technology systems. The CIO is responsible for strategic planning for the enterprise-wide IT systems in collaboration with departments to meet business needs. The CIO also functions as the Commission's Chief Technology Security Officer.

The CIO's budget consists of three parts:

- 1. **Corporate IT** funded by the two Administration Funds and chargebacks. Before FY19, this was part of the Finance Department.
- 2. Office of the CIO an internal service fund (ISF), funded by direct charges to using departments
- 3. **Commission-wide IT Initiatives (CWIT)** also an ISF, funded by direct charges to using departments.

The IT Council, consisting of representatives of each major department, reviews the budgets for the Office of the CIO and for CWIT. Their recommendations are noted alongside each budget request below.

Operational Update

Several major projects were started in FY18 and FY19:

- The **ERP upgrade to Infor V10 project** was kicked off in February 2018. The project has three main components and is being carried out in two phases.
 - Phase One components
 - 1. Upgrade from Lawson V9 to Infor V10
 - 2. Business Process Improvements
 - Phase Two has one component with two new modules
 - 1. Strategic Sourcing module and
 - 2. Contract Management module

Expected Completion April 2019

- Kronos, the Time and Labor Management System, is going through an upgrade to the newest version to address pressing business needs for payroll automation and ERP Integration. expected completion December 2018
- **Microsoft Active Directory** upgrade is a project that will have several significant benefits:
 - 1. Establish Highly Available Active Directory infrastructure utilizing Microsoft Azure Cloud to provide security and continuity;
 - 2. The System will be deployed in a distributed manner; where each Department will have its own Domain Controller.
 - 3. Secured and Policy-based management;
 - 4. Provide a highly available and reliable identify infrastructure;
 - 5. Modular design will be provide as needed for scalability.

Expected Completion February 2019

- **The Security Assessment Project** is underway. The project is expected to be completed by December 2018. We anticipate that the report will provide us with significant findings that will lay the groundwork for strengthening the Commission's IT security posture.
- The **position of IT Security Officer**, approved in the FY19 Budget, will be recruited for and filled by December 2018.

CORPORATE IT - FY20 Budget Request

Corporate IT was transferred from the Finance Department, operationally in FY18, and budget-wise in FY19. This division performs two Sections: Enterprise IT and EOB IT. Enterprise IT (14 staff) provides core business systems, such as: ERP, Time and Labor Management, Utility management systems, to all Commission departments and is partially funded by chargebacks to the two Park Funds. EOB IT (4 staff) provides computer, telephony and network services to the CAS departments in the Executive Office Building and Office of the Inspector General (IG). EOB IT provides help-desk support to EOB users, Employee Retirement System (ERS) staff, and IG Office staff at the Walker Drive Office. After chargebacks, Corporate IT is funded by the Montgomery County and Prince George's County Administration Funds.

The net proposed budget for Corporate IT is \$2,904,201, a decrease of 11.8%.

Corporate IT PRELIMINARY FY20 OPERATING BUDGET REQUEST MC Admin PGC Admin DEPARTMENT

	Fund	Fund	TOTAL	% Change Positions
FY19 Adopted Budget _	\$ 1,551,290	1,740,798	\$ 3,292,088	-
FY20 BASE BUDGET INCREASES				
Salaries Benefits Other Operating Changes Chargebacks_ Subtotal Increase - Base Budget Request	23,438 19,466 105,050 (302,326) \$ (154,372)	(4,542) 12,890 169,317 (494,709) \$ (317,044)	32,356 274,367	-14.3%
PROPOSED CHANGES				
Increase PC/Peripheral Refresh to \$100k Share of CIO Initiatives Share of CWIT Initiatives Subtotal Proposed Changes	19,401 1,213 18,870 \$ 39,484	24,196 979 18,870 \$ 44,045	43,597 2,192 <u>37,740</u> \$ 83,529	2.5%
Total Increase FY20 Proposed Budget Request	<u>\$ 1,436,402</u>	\$ 1,467,799	\$ 2,904,201	-11.8%

Table 1

Corporate IT Base Budget

The Base Budget increases consist primarily of increased health insurance, and the increased cost of the Infor ERP maintenance after moving to the cloud.

Before chargebacks, the base budget for Corporate IT is proposed to increase 7.7%. After chargebacks, the base budget will decrease by 14.3%.

Chargebacks have increased for two reasons:

- 1. \$103,000 due to the increase in Infor annual cost resulting from migrating from On-Premise to Cloud Software as a Service subscription (SaaS); and
- \$694,000 due to shifting additional chargebacks from Finance to Corporate IT (we are continuing to refine the calculation methodology begun in FY19). The Finance Department's budget presentation shows a commensurate decrease in chargebacks, netting an increase in that proposed budget.

Corporate IT New Initiatives

New initiative requests in Corporate IT consist of:

- Increasing the funding of the Computer Refresh Program to ensure a timely and structured computer and peripheral replacement schedule, ensuring computer equipment availability when needed and reducing maintenance cost and downtimes through complete asset management. Last year \$100,000 was requested; subsequent budget reductions reduced that amount to \$56,403. The request for \$43,597 would bring the funding amount to the desired level.
- The division's share of proposed CIO and CWIT new initiative requests (\$39,932)

OFFICE OF THE CIO ISF - FY20 Budget Request

The Office of the CIO ISF is an internal service fund (ISF) funded by direct charges to the user departments. With a staff of six, the CIO's office provides management of the Commission-wide IT function, and provides project management of the numerous Commission-wide IT (CWIT) projects that are funded separately in the CWIT ISF.

Office of the CIO ICE

Office of the CIO ISF		
PRELIMINARY FY20 OPERATING BUDGET REQUEST		
FY19 Adopted Budget \$ 1,188,051	% Change	Positions
FY20 BASE BUDGET INCREASES		
Salaries116,008Benefits46,690Other Operating Changes352Subtotal Increase - Base Budget Request\$163,050	13.7%	
PROPOSED CHANGES		
Project Manager/Systems Analyst 146,636 Share of CWIT Initiatives 60 Subtotal Proposed Changes \$ 146,696		1.0
Total Increase FY20 Proposed Budget Request <u>\$ 309,746</u>	26.1%	

Table 2

A chart showing the impact, by user department, of the CIO ISF budget request is included in <u>Attachment</u> <u>A.</u>

CIO ISF Base Budget

The CIO base budget reflects an increase of \$163,050 or 13.7% due to:

- 1. FY19 new IT Security position was budgeted for only 9 months; FY20 is for full year.
- 2. Pension is not budgeted for any new positions in the requesting year, as we do not know if they will eventually be approved. If positions are not approved, we still need the full pension budget, as determined by the actuarial valuation.
- 3. Health insurance increases, OPEB increases, and compensation markers.

CIO ISF New Initiatives

Project Manager/Systems Analyst - \$146,636

The numerous CWIT projects that are managed have required the hiring of consultants for extended periods. The Project Manager/Systems Analyst will be integral part of the PMO in gathering and performing in developing in depth requirement analysis to ensure systems implementation achieve goals and objectives. This new position will reduce that consulting need, as well as allow us to retain the expertise and institutional knowledge gained in implementing these projects.

The IT Council supported this new initiative request.

COMMISSION-WIDE IT (CWIT) ISF - FY20 Budget Request

The CWIT ISF provides multi-year funding for Commission-wide IT software licenses and IT infrastructure projects.

The proposed budget for the CWIT ISF is presented in two sections: 1) base budget, consisting of on-going software licenses and continuing projects; and 2) new project initiatives.

A chart showing the impact, by user department, of the CWIT ISF budget request is included in <u>Attachment B</u>.

The CIO prepared and presented the annual Enterprise Project Plan (EPP) and presented full details of all ongoing and new Commission-wide IT Projects and initiatives. The CIO also developed business cases with detailed information to assist each IT Council member to form an opinion and be able to develop a position on every current and newly developed initiative. IT Council members reviewed the requests, requested additional information, discussed in several meetings, often revised the requested funding level, with the result that a majority recommended moving forward with the following projects. IT Council members arrived at a consensus to support all initiatives. Although the IT Council does not have approval authority, in light of budget uncertainties, and in acknowledgement of the IT Council's efforts during the budget review process, the CIO chose to bring forward only those initiatives that were supported unanimously. Attachment C contains an extract from the Enterprise Project Plan (EPP).

	FY20			
		Proposed	FY20	
	FY19	Increase /	Proposed	
	Budget	Decrease	Budget	
Base Budget				
Microsoft Licenses	900,000	500,000	1,400,000	
Kronos Cloud Services	120,000	-	120,000	
Adobe Cloud	140,000	7,525	147,525	
Website License	60,000	3,000	63,000	
Website Upgrade	60,000	(40,000)	20,000	
ERP Enhancements	129,525	20,475	150,000	
Security Mentoring		55,000	55,000	
	1,409,525	546,000	1,955,525	
New Project Initiatives:				
Microsoft Licenses Upgrade	-	400,000	400,000	
Time and Attendance Management	-	75,000	75,000	
Active Directory Phase V	-	100,000	100,000	
Remediation of Security Assessment Findings	-	150,000	150,000	
Budget Software replacement	-	75,000	75,000	
ECM Feasibility & Requirements Study	-	100,000	100,000	
Intranet Upgrade		150,000	150,000	
	-	1,050,000	1,050,000	

Proposed Budget for CWIT Licenses and Projects

CWIT ISF Base Budget Requests

Microsoft Licenses -\$500,000

Microsoft sought to have the Commission shift all license purchases away from Microsoft "MS Select" to "Enterprise" and billing it all through the annual Enterprise Agreement "EA". This approach is acceptable by the Commission as it ensures best prices from Microsoft. In FY18 CWIT funded \$900,000 for O365 licenses while the Commission departments spent \$400,000 using "MS Select", thus putting the total expenditure at \$1.3 million. If departments budgeted the \$400,000 for this purpose, there should be an offsetting reduction in departmental IT budgets. The additional \$100,000 is driven by the license type change and the increase in license quantities.

Kronos Cloud Services - no change from FY19

Adobe Cloud - \$7,525 reflecting a 5% increase over FY19.

Website License - \$3,000 reflecting a 5% increase over FY19.

Website Upgrade - (\$40,000) reflecting IT Council's position to only support ADA compliance

<u>ERP Enhancements</u> - \$20,475 reflecting the IT Council's agreement to increase the total funding to \$150,000.

<u>Security Mentoring</u> - \$55,000. This is a three-year subscription for security training that was funded as a trial by budget savings in the past. The desire is to continue this training and properly budget for it.

CWIT ISF New Initiatives

Microsoft Licenses Upgrade - \$400,000

As the CIO and Department representatives review subscriptions ahead of another 3-year EA renewal, license type upgrades and enhanced security features requested by Departments will increase the cost by \$400,000.

IT Council Recommendations: Unanimous

Time and Attendance Management (Kronos) - \$75,000

Enhancements, additional features, and Integration with other systems. The effort is to establish a detailed 3-year enhancements program to achieve cost savings and efficiencies.

The effort is to establish a detailed 3-year enhancements program to achieve cost savings and efficiencies. This program will bring automation and efficiencies that will benefit departments as well as Human Resources, Payroll processing, and Finance.

Proposed Enhancements:

- Migrate from hosted environment to Cloud SaaS subscription
- Implement Kronos scheduling module

Active Directory Phase V - \$100,000

The Active Directory Project has uncovered many complexities and challenging problems primarily due to the initial implementation at the department level with no defined path to interconnect with the Enterprise directory.

- This phase will address legacy systems and applications;
- assist in resolving technical problems that may require systems customizations and
- ensure the legacy environment retirement by the end of 2020.

IT Council Recommendations: Unanimous

Remediation of Security Assessment Findings - \$150,000

The CWIT Security Assessment findings need to be addressed through a combination of in-house technical staff and consultants. Typical findings will have short term, midterm, and long-term recommendations with associated costs that vary depending on the level of effort and hardware/software modifications driven by the findings.

Funding the identified risks is critical in mitigating the Commission's cyber security risk. We all are responsible for the security of MNCPPC IT systems.

IT Council recommended approaching the Security assessment findings remediation by placing funds in CWIT and allocate funds at the department level. Remediation administration must be administered within CWIT Initiatives.

IT Council Recommendations: Unanimous

Budget Software Replacement - \$75,000

The existing Lawson Budget Planning Software has reached end of life and will lose all support mid-2019. IT Council recommended to begin requirement gathering to replace the existing system in FY19.

Strategic goals and objectives of the Commission:

- Integration with Infor ERP EFM to achieve unification for easy access and work flow.
- Improved efficiency/connectivity for Budget System users.
- Elimination/reduction of manual data input.
- Minimal custom development needed to meet the Commission business needs.
- Easy access to data for tracking, reporting and forecasting.

IT Council Recommendations: Unanimous

Enterprise Content Management (ECM) - Feasibility & Requirements Study - \$100,000

An ECM solution will help the Commission to organize, manage and distribute documents, images, departmental specific information. The project involves conducting a thorough needs assessment and for the Project team to establish a comprehensive inventory of requirements and identify a solution that will

store, track, edit, and collaborate on content creation and other information related projects, while maintaining appropriate security levels. The solution will also streamline the life-cycle of information and automates various business processes using embedded workflows. ECM Key Features: Regulatory Compliance, Access Controls, Document Capture, Archiving & Retention, Document and Content Management, Document Security, Business Process Automation, E-Forms, Electronic Signature, Disaster Recovery.

We currently own multiple variations of ECM yet several Department representatives at multiple levels have stated the need for a comprehensive Enterprise Content Management. If not funded, the technology gap among such variations will not be resolved. Our ability to achieve end-to-end digital transformation will be reduced and with it goes the ability to create effective workflows and automations around it.

IT Council Recommendations: Unanimous with some continuing reservations from Montgomery County Parks.

Commission Intranet Upgrade - \$150,000

- The Intranet platform is at end of life and must move to a supported platform
- Upgrade of existing Intranet (InSite) to a new supported platform and procure additional resources to automate and improve access to the platform. The project was requested but not funded in FY19. The Platform must be upgraded as soon as possible.
- The upgrade will allow access to content outside of our network in a secure manner.

IT Council recommended to fund the platform upgrade in FY19 to ensure availability and reliability while a full solution is identified and deployed utilizing FY20 funds.

IT Council Recommendations: Unanimous with some continuing reservations from Montgomery County Parks.

Breakout of the CIO ISF Budget Request by Department

The CIO ISF is funded by charges to the supported departments; if the proposed requests are approved, the budgetary impact on each department is as follows:

CIO Base Budget and New Initiative Impact							
	FY19	Base Change from FY19	New Initiative Change	Total Proposed Change			
Prince George's:							
Planning	99,153	(23,952)	8,161	(15,791)			
Parks	313,679	(155,456)	17,171	(138,285)			
Recreation	209,120	265,849	51,545	317,394			
DHRM	14,887	(4,359)	1,143	(3,216)			
Finance	16,986	(7,060)	1,077	(5,983)			
Corporate IT	7,815	1,209	979	2,188			
Legal	10,191	(2,670)	816	(1,854)			
Inspector General	680	72	82	154			
	672,511	73,633	80,974	154,607			
Montgomery:							
Planning	151,785	(58,612)	10,111	(48,501)			
Parks	260,930	204,561	50,516	255,077			
DHRM	22,843	(9,799)	1,416	(8,383)			
Finance	25,382	(13,084)	1,335	(11,749)			
Corporate IT	11,676	(495)	1,213	718			
Legal	15,229	(6,284)	971	(5,313)			
Inspector General	1,014	(82)	101	19			
	488,859	116,205	65,663	181,868			
	1,161,370	189,838	146,637	336,475			

Table 4

ATTACHMENT B

Breakout of the CWIT ISF Budget Request by Department

The CWIT ISF is funded by charges to the supported departments; if the proposed requests are approved, the budgetary impact on each department is as follows:

	Base B									
	Base Budget Change from FY19		Time & Attendance Mgmt	Budget Software	Intranet Upgrade	Active Directory	Security Remediation	ECM	Total New Initiatives	Total Base and New Initiatives Increase
Prince George's:										
Planning	(8,850)	26,000	5,900	5,840	7,500	3,000	7,500	8,000	63,740	54,890
Parks	(48,790)	52,000	17,080	17,800	22,500	20,000	26,250	12,000	167,630	118,840
Recreation	342,910	160,000	17,090	17,800	30,000	30,000	26,250	25,000	306,140	649,050
DHRM	(2,450)	-	-	1,040	7,500	-	7,500	5,000	21,040	18,590
Finance	(2,370)	-	-	920	11,250	-	7,500	5,000	24,670	22,300
Corporate IT	(3,270)	12,800	2,030	320	-	1,500	-	-	16,650	13,380
Legal	(1,950)	-	-	380	-	-	-	-	380	(1,570)
Inspector General	(1,020)	-	-	100	-	-	-	-	100	(920)
CIO	(870)	-		20	-			-	20	(850)
	273,340	250,800	42,100	44,220	78,750	54,500	75,000	55,000	600,370	873,710
Montgomery:										
Planning	(3,640)	25,600	4,740	4,460	15,000	9,000	30,000	10,000	98,800	95,160
Parks	306,435	110,800	26,150	23,570	37,500	35,000	30,000	25,000	288,020	594,455
DHRM	(2,450)	-	-	1,040	7,500	-	7,500	5,000	21,040	18,590
Finance	(2,370)	-	-	920	11,250	-	7,500	5,000	24,670	22,300
Corporate IT	(3,270)	12,800	2,030	320	-	1,500	-	-	16,650	13,380
Legal	(1,950)	-	-	380	-	-	-	-	380	(1,570
Inspector General	(1,020)	-	-	100	-	-	-	-	100	(920)
СЮ	(870)	-	-	20	-	-		-	20	(850
	290,865	149,200	32,920	30,810	71,250	45,500	75,000	45,000	449,680	740,545
Total	564,205	400,000	75,020	75,030	150,000	100,000	150,000	100,000	1,050,050	1,614,255

Table 5

Note of explanation on the base budget changes: The majority of the change is due to reallocation of Microsoft licenses cost, which in turn is based on an updated count of departmental licenses. The previous count was three years old. Montgomery Parks is also higher by \$19,600 because the department pre-paid the FY19 CWIT debt service in FY18, as part of their final FY19 budget balancing.

Enterprise Project Plan (EPP)

The CIO prepares and presents to the IT Council an annual Enterprise Project Plan (EPP) and presents full details of all ongoing and new Commission-wide IT projects and initiatives. The EPP includes all available information pertaining to the business case, resource needs, each project's name, project manager, project team, total budget, date of initiation, project milestones and estimated completion date. While business cases are included as supplemental material, the following is an extract from the submitted EPP.

ERP Enhancements

The Project Management Office (PMO) developed a strategy to deliver current ERP functions along with prioritized process improvement and automation by the Nov 13, 2018 Go-Live. The PMO has also planned to deliver a set of post Go-Live priorities as part of the ERP roadmap of standardization, automation, process re-engineering, and systems integration. Such as:

- Strategic Sourcing, Contracts Management,
- NEO-Gov integrations, and
- additional Personnel Action automations based on business needs communicated directly from ERP stakeholders.

Return on Investment (ROI)

The Returns on Investment from implementing additional enhancements will address several aspects of our business environment: Evolving business needs, desired service levels, and cost associated to business processes. Building on the ERP upgrade project we need to realize the Return on Ideas from ERP implementation in a direct manner:

- 1. Addressing the current needs and plan to address unmet needs as enhancements
- 2. Improving service levels
- 3. Reducing business cost

Lack of Automation Efficiencies

- New business needs will not be met, and makeshift work arounds will become normal business practice
- New business initiatives will be harder to achieve due to a lack of ERP system and organization agility
- Lack of system enhancements contributes to stagnate user skills and creative thinking

Time and Attendance Management (Kronos)

Annual Standing budget to Achieve: Enhancements, additional features, and Integration with other systems.

The effort is to establish a detailed 3-year enhancements program to achieve cost savings and efficiencies. The Seasonal Payroll Automation (SPA) will set the stage for streamlining business processes across the commission. Please see attached SPA requirements and Kronos enhancements document. Funding will enable this enhancement program to go forward.

Proposed Enhancements:

- Migrate from hosted environment to Cloud SaaS subscription
- Implement Kronos scheduling module

Active Directory Phase V

The Active Directory Project has uncovered many complexities and challenging problems, this is mostly due to the initial implementation at the department level with no defined path to interconnect with the Enterprise directory.

- This phase will address legacy systems and applications.
- Assist in resolving technical problems that may require systems customizations.
- Ensure the legacy environment retirement by the end of 2020.

If not funded, remaining legacy systems will remain in the old AD environment. The old environment has structural issues and increased security risks; and therefore, cannot stay online open-endedly.

Budget Software Replacement

To replace Lawson Budget Planning (LBP), end of support for this version is June 2019. Strategic goals and objectives of the Commission:

- Replace the existing version of Lawson Budget Planning (LBP) with the new D/EPM from Infor or Select a different application.
- Integration with Infor ERP EFM to achieve unification for easy access and work flow.
- Improved efficiency/connectivity for Budget System users.
- Elimination/reduction of manual data input.
- Minimal custom development needed to meet the Commission business needs.
- Easy access to data for tracking, reporting and forecasting.
- Transfer of knowledge from the Consultant to the Commission Project Team.
- Members to ensure long-term in-house application support.

Enterprise Content Management (ECM)

An Enterprise Content Management (ECM) solution will help the Commission to organize, manage and distribute documents, images, departmental specific information. The project involves conducting a thorough needs assessment and for the Project team to establish a comprehensive inventory of requirements and identify a solution that will store, track, edit, and collaborate on content creation and other information related projects, while maintaining appropriate security levels. The solution will also streamline the life-cycle of information and automate various business processes using embedded workflows. ECM Key Features: Regulatory Compliance, Access Controls, Document Capture, Archiving & Retention, Document and Content Management, Document Security, Business Process Automation, E-Forms, Electronic Signature, Disaster Recovery.

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Commission Intranet Upgrade

• Upgrade of existing Intranet (InSite) to a new supported platform and procure additional resources to automate and improve access to the platform. The project was requested but not funded in FY19. The Platform must be upgraded soon as possible.

- The Intranet platform is at end of life and must move to a supported platform
- The upgrade will allow access to content outside of our network in a secure manner.

Funding is needed to upgrade platform and CMS tool to mitigate the risk posed by the existing platform, as time goes by the risk increases significantly.