

#### Program Description

The information technology (IT) and equipment maintenance capital program maintains the County's technology assets in order to 1) sustain the County's existing business systems so they remain useful, operable and responsive to business needs, 2) best leverage the existing infrastructure to support the business needs of the entire County as well as department specific applications, 3) reduce operating and support costs associated with aging hardware, and 4) provide a reliable and secure environment for the operation of the County's systems while furthering the County's goals for energy efficiency and worker productivity.

The IT systems, software, and hardware which serve departments typically reach the end of their useful life in three to ten years. At that point, the systems become increasingly costly to maintain and difficult to exchange information with other systems. Priorities for determining which applications to replace first are driven by age, criticality of the system to operations, and availability of ongoing support from the application's vendor. The IT systems and equipment are paid for through a combination of PAYG and short-term financing, with operating impacts through principal and interest payments on the short-term finance as described in the Capital Financing section of the CIP.

#### Program Summary

IT and equipment maintenance capital falls into four major program areas: Enterprise Information Technology (EIT), Lines of Business Systems, Public Safety Technology, and General Equipment.

The Enterprise Information Technology capital improvement program funds four categories:

- Maintenance Capital - Equipment includes the ongoing replacement of aging workforce devices (desktop computers, and laptops), servers, networks, audio visual, and other equipment, both employee and public facing. Tools to support enhanced virtual government services and employee mobility.
- Hardware and Application Refreshment includes refreshment/replacement of software systems that provide key resources to meet the County's internal and external demands. This includes upgrades to systems that are used County-wide such as the revenue and collection system and the human resources and financial system.
- Data Management (which is new for the CIP)- The County is in the process of developing a Cloud Smart Strategy when it comes to migrating applications and data to the cloud rather than storing them on-premise using physical servers. The goal is to store applications and data in the most appropriate storage environment. Considerations for which applications should be migrated include: portability (can the application be migrated); appropriateness (should this data be migrated); and cost (are the costs to migrate the data over time less than the cost to maintain the data on-premise). As applications are identified, evaluated according to the Cloud Smart Strategy, and migrated, this transfers what have traditionally been capital costs to operating costs as cloud server space and data consumption will now be charged on an annual and/or subscription basis. If enough applications are migrated, the County can reduce its on-premise data storage demand which is currently paid for from the Server program. It is anticipated that less reliance on physical servers may reduce the County's physical footprint at one or both data centers. This allows the County to reduce or ideally decommission one or both data centers as appropriate County applications and data are now stored in the cloud. If County data center space can be reduced or eliminated entirely, this may reduce the County's carbon footprint to store data and potentially free up County space for other uses.

The Cloud Smart Strategy calls for the County to outsource day to day data management, where appropriate, to cloud service providers that are in charge of serving the County's data needs according to industry best practices. Benefits from adopting this approach include: enhanced security and disaster recovery for applications and data stored in the cloud; greater availability by making applications and data available to County staff and residents from multiple device types, anytime, anywhere; improved data affordability as the County is only paying for the data it is currently using; increased flexibility and scalability of data storage and consumption as the County can rapidly scale up or down its use of cloud services as needed to respond to emerging needs; and reduced reliance on staff resources for data management which frees up staff time to focus on IT improvements and innovations.

• Future Technology Initiatives is new program area for this CIP and provides funding to plan for the introduction of new technologies to assist the County in streamlining and enhancing service delivery to residents. Examples of technology that may be considered for implementation include: Blockchain technology (for secure financial transactions), Artificial Intelligence, Robotic Process Automation and Municipal Internet of Things (which allows an array of smart devices to connect to the internet wirelessly throughout the County).

- Line of Business Systems include systems and equipment that are required for a department to maintain its specific operations and services. This CIP funds replacement of existing line of business applications such as land records, and real estate assessment. It also includes technology upgrades and new systems that the Department of Human Services requires to manage mandated health services and day care/childcare services and information. This CIP also funds the replacement of IT equipment for the Office of Voter Registration.

- The Public Safety Technology capital improvement program consists of key projects that will keep existing IT systems refreshed or replaced on a reasonably expected life cycle so that the systems remain useful, operable, and responsive to public safety needs. Special concerns for forecasting public safety technology requirements include rapid technology advances that require upgrades and/or replacements; the need to maintain interoperability within the region; the need to maintain redundancies that are required for safety and to avoid system failures; and responding to the changing needs of the workforce and the community. These issues may impact not only the needs of public safety, but also the timing and scope of future projects. These projects are managed by the four public safety agencies: Police Department, Fire Department, Department of Public Safety Communication and Emergency Management and the Office of the Sheriff. New for this CIP, the public safety projects have been organized around lines of business rather than department. The key lines of business for public safety capital projects are: Detention Center Security, Facility Improvements, Public Safety, Communications, Public Safety IT Applications and Hardware, Response Equipment, Public Safety Vehicles. The useful life of these projects range from three to ten years and must be refreshed to maintain operability.

Equipment includes machines that are used by individual departments for specific purposes. These include Voting Machines and Tub Grinder.

## **Master Plan Impact**

Advisory Commission: Information Technology (IT) Advisory Commission; Emergency Preparedness Advisory Commission

**INFORMATION TECHNOLOGY/EQUIPMENT:  
PROGRAM SUMMARY**

## 10 YEAR PROGRAMMED CATEGORY SUMMARY (in \$1,000s)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	10 Year Total
Enterprise Information Technology	19,488	19,068	14,209	9,141	8,533	7,118	6,755	6,844	6,404	6,720	104,280
Lines of Business Systems	2,600	1,600	650	0	0	0	500	0	0	0	5,350
Detention Center Security	1,400	750	200	200	200	200	450	200	200	200	4,000
Facility Improvements	400	0	0	0	0	350	0	0	1,500	0	2,250
Public Safety Communications	5,539	2,850	2,850	5,350	0	0	0	4,200	0	0	20,789
Public Safety IT Applications and Hardware	333	472	5,562	522	3,872	222	472	2,239	222	3,872	17,788
Response Equipment	0	3,500	0	275	0	0	0	4,600	3,500	0	11,875
Vehicles and Vehicle Technology	0	2,300	0	0	6,400	0	8,000	0	6,200	0	22,900
Equipment	0	0	2,000	0	0	0	0	1,200	0	0	3,200
<b>Total Recommendation</b>	<b>29,760</b>	<b>30,540</b>	<b>25,471</b>	<b>15,488</b>	<b>19,005</b>	<b>7,890</b>	<b>16,177</b>	<b>19,283</b>	<b>18,026</b>	<b>10,792</b>	<b>192,432</b>

## PROGRAM FUNDING SOURCES (in \$1,000s)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	10 Year Total
<b>New Funding</b>											
Federal Funding	0	0	0	0	0	0	0	0	0	0	0
State Funding	0	0	0	0	0	0	0	0	0	0	0
Developer Contributions	0	0	0	0	0	0	0	0	0	0	0
New Bond Issue	0	0	0	0	0	0	0	0	0	0	0
PAYG	1,221	7,415	9,221	1,713	1,155	1,765	4,452	1,633	4,526	1,342	34,443
Short Term Finance	13,324	13,150	15,400	12,850	17,000	5,225	10,825	16,750	12,600	8,550	125,674
Stormwater Utility Fee Revenue	0	0	0	0	0	0	0	0	0	0	0
Other Funding	0	0	0	21	850	900	900	900	900	900	5,371
<b>Subtotal New Funding</b>	<b>14,545</b>	<b>20,565</b>	<b>24,621</b>	<b>14,584</b>	<b>19,005</b>	<b>7,890</b>	<b>16,177</b>	<b>19,283</b>	<b>18,026</b>	<b>10,792</b>	<b>165,488</b>
<b>Previously Approved Funding</b>											
Authorized but Unissued Bonds	0	0	0	0	0	0	0	0	0	0	0
Issued but Unspent Bonds	815	575	850	904	0	0	0	0	0	0	3,144
Other Previously Approved Funds	14,400	9,400	0	0	0	0	0	0	0	0	23,800
<b>Subtotal Previously Approved Funding</b>	<b>15,215</b>	<b>9,975</b>	<b>850</b>	<b>904</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26,944</b>
<b>Total Funding Sources</b>	<b>29,760</b>	<b>30,540</b>	<b>25,471</b>	<b>15,488</b>	<b>19,005</b>	<b>7,890</b>	<b>16,177</b>	<b>19,283</b>	<b>18,026</b>	<b>10,792</b>	<b>192,432</b>