

## INFORMATION TECHNOLOGY/EQUIPMENT PROGRAMS

### Program Description

The information technology (IT) and equipment maintenance capital program maintains the County's IT and equipment 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 data processing 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 applications vendor. The IT systems and equipment are paid for through a combination of PAYG and master lease purchase, with operating impacts through principal and interest payments on the master lease as described in the Capital Financing section of the CIP.

### Program Summary

IT and equipment maintenance capital falls into three major program areas: Enterprise Information Technology, Public Safety Technology, and Other Equipment.

The Enterprise IT capital improvement program funds three categories:

- Maintenance Capital - Equipment includes the ongoing replacement of aging PCs, servers, networks, and other equipment, both employee and public facing.
- Digital Alignment and Customer Services and Engagement - The goals of the digital alignment program are to rework internal processes to enhance worker productivity and enable a digital workplace and to encourage digital relationships. Customer Services and Engagement can be enhanced by building on our existing infrastructure to provide relevant County information for our residents, businesses and the community. This includes updates to and/or replacement of the County's Real Estate Assessment System, Land Record System, Revenue and Collection System, Financial and Human Resource system, and the Online Payment Portal.
- Worker Mobility – Tools to support a proactive government include wireless connectivity to support staff in their delivery of services as well as wireless connection for residents, businesses and partners at County facilities.
- Emergency Communications – Network hardware must be updated and in working order to allow the public safety radio hardware to function properly.

The Public Safety 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. The useful life of these projects range from three to ten years and must be refreshed to maintain operability.

Other Equipment include special systems and equipment that is required for a department to maintain its specific operations and services. This CIP funds specific equipment such as voting machines for the Electoral Board during the presidential election cycles as well as technology upgrades for systems that the Department of Human Services requires to manage mandated health services.

### Master Plan Impact

Associated Master Plan: Telecommunications Master Plan III

Advisory Commission: Information Technology (IT) Advisory Commission

INFORMATION TECHNOLOGY/EQUIPMENT: PROGRAM FUNDING SUMMARY

CIP  
2017 – 2026

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

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Enterprise Information Technology	3,996	9,742	6,128	4,818	5,140	4,668	12,368	10,498	5,881	5,001	68,240
Public Safety Information Technology	8,631	8,753	5,034	3,894	5,468	9,717	5,026	13,432	8,903	5,350	74,208
IT/Other	2,124	0	0	0	843	0	0	0	949	0	3,916
<b>Total Recommendation</b>	<b>14,751</b>	<b>18,495</b>	<b>11,162</b>	<b>8,712</b>	<b>11,451</b>	<b>14,385</b>	<b>17,394</b>	<b>23,930</b>	<b>15,733</b>	<b>10,351</b>	<b>146,364</b>

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

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
<b>New Funding</b>											
New Bond Issue	0	4,000	2,000	0	2,000	2,000	9,000	8,000	2,000	2,000	31,000
PAYG	749	1,822	1,473	1,888	2,605	1,667	2,051	1,055	3,650	2,031	18,991
Master Lease	14,002	9,745	7,689	4,791	5,164	7,253	6,343	14,875	10,083	6,320	86,265
Other Funding	0	2,928	0	2,033	1,682	3,465	0	0	0	0	10,108
<b>Subtotal New Funding</b>	<b>14,751</b>	<b>18,495</b>	<b>11,162</b>	<b>8,712</b>	<b>11,451</b>	<b>14,385</b>	<b>17,394</b>	<b>23,930</b>	<b>15,733</b>	<b>10,351</b>	<b>146,364</b>
<b>Previously Approved Funding</b>											
Other Previously Approved Funds	0	0	0	0	0	0	0	0	0	0	0
<b>Subtotal Previously Approved Funding</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Funding Sources</b>	<b>14,751</b>	<b>18,495</b>	<b>11,162</b>	<b>8,712</b>	<b>11,451</b>	<b>14,385</b>	<b>17,394</b>	<b>23,930</b>	<b>15,733</b>	<b>10,351</b>	<b>146,364</b>

Projected Additional Operating Costs (in \$1,000s)

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Bond Financing Costs	0	0	451	893	1,274	1,598	1,875	3,078	4,529	4,955
Master Lease Financing Costs	0	3,078	5,211	6,654	6,596	7,378	8,429	8,617	9,235	8,800
Auto Fund Master Lease Financing Costs	0	0	501	501	850	1,138	1,731	1,731	1,731	1,230
<b>Net Operating Cost</b>	<b>0</b>	<b>3,078</b>	<b>6,163</b>	<b>8,048</b>	<b>8,720</b>	<b>10,114</b>	<b>12,035</b>	<b>13,426</b>	<b>15,495</b>	<b>14,985</b>

# Arlington County, Virginia

## ENTERPRISE INFORMATION TECHNOLOGY: PROGRAM FUNDING SUMMARY

CIP  
2017 – 2026

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

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Maintenance Capital	3,496	4,562	3,808	4,498	4,820	4,128	4,048	3,678	4,311	4,681	42,030
Digital Alignment & Citizen Services and Engagement	0	4,350	2,000	0	0	0	8,000	6,000	1,000	0	21,350
Worker Mobility	0	580	320	320	320	540	320	320	320	320	3,360
Emergency Communications	500	250	0	0	0	0	0	500	250	0	1,500
<b>Total Recommendation</b>	<b>3,996</b>	<b>9,742</b>	<b>6,128</b>	<b>4,818</b>	<b>5,140</b>	<b>4,668</b>	<b>12,368</b>	<b>10,498</b>	<b>5,881</b>	<b>5,001</b>	<b>68,240</b>

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

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
<b>New Funding</b>											
New Bond Issue	0	4,000	2,000	0	0	0	7,000	6,000	0	0	19,000
PAYG	0	1,822	1,473	1,888	1,762	1,667	2,051	1,055	2,701	2,031	16,450
Master Lease	3,996	3,920	2,655	2,930	3,378	3,001	3,317	3,443	3,180	2,970	32,790
<b>Subtotal New Funding</b>	<b>3,996</b>	<b>9,742</b>	<b>6,128</b>	<b>4,818</b>	<b>5,140</b>	<b>4,668</b>	<b>12,368</b>	<b>10,498</b>	<b>5,881</b>	<b>5,001</b>	<b>68,240</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	0	0	0	0	0	0	0	0	0	0	0
Other Previously Approved Funds	0	0	0	0	0	0	0	0	0	0	0
<b>Subtotal Previously Approved Funding</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Funding Sources</b>	<b>3,996</b>	<b>9,742</b>	<b>6,128</b>	<b>4,818</b>	<b>5,140</b>	<b>4,668</b>	<b>12,368</b>	<b>10,498</b>	<b>5,881</b>	<b>5,001</b>	<b>68,240</b>

# INFORMATION TECHNOLOGY/EQUIPMENT

## ENTERPRISE INFORMATION TECHNOLOGY

2017 – 2026 CIP

### Maintenance Capital

#### Project Description

This program supports sustainment and replacement of enterprise IT equipment and is associated with the Digital Strategy (2015-2020). This includes network equipment, application servers, data storage equipment, personal computers, laptops, tablets and firewalls. These cost estimates are subject to change based on the technologies the County decides to use.

Personal computers are replaced on an industry-recommended cycle of every four years. Delaying replacement increases support costs and reduces productivity. County business and service delivery is changing such that there is a need to provide more flexible end-user computing solutions. This will include, but not be limited to, new approaches to the integration of consumer technologies into the workplace. The mobility of our worker is also driving a different mindset and purchasing approach for the replacement of desktop computers. The existing "PC Refreshment" effort must be changed to support the types of devices and timing of purchases to support the new environment. Network Core includes the switches and routers for the County's data and voice network; these need to be replaced approximately every five years. Server refreshment replaces servers that support County applications. Failure to replace servers in a timely manner will lead to inaccessible systems causing a reduction in department productivity and services to citizens. Data storage refreshes enterprise storage required to support critical line of business applications. The data storage requirements are perpetually growing.

#### Capital Costs during Ten Year Period (FY to FY ) (in \$1,000s)

Projects	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
End User Computing Equipment (PC Refresh)	833	1,594	1,638	1,683	1,590	1,591	1,496	1,496	1,496	1,496	14,912
Network Core	1,733	2,173	1,835	2,080	2,480	1,951	1,780	1,880	2,080	2,410	20,402
Servers/Backup Systems/Data Storage Refresh	880	795	335	735	750	535	772	302	735	775	6,614
Critical Power Supplies	50	0	0	0	0	52	0	0	0	0	102
<b>Total Costs</b>	<b>3,496</b>	<b>4,562</b>	<b>3,808</b>	<b>4,498</b>	<b>4,820</b>	<b>4,128</b>	<b>4,048</b>	<b>3,678</b>	<b>4,311</b>	<b>4,681</b>	<b>42,030</b>

  

Funding Schedule (in \$1,000s)											
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
<b>New Funding</b>											
Master Lease	3,496	3,090	2,335	2,610	3,058	2,461	2,997	2,623	2,610	2,650	27,930
PAYG	0	1,472	1,473	1,888	1,762	1,667	1,051	1,055	1,701	2,031	14,100
<b>Total Revenues</b>	<b>3,496</b>	<b>4,562</b>	<b>3,808</b>	<b>4,498</b>	<b>4,820</b>	<b>4,128</b>	<b>4,048</b>	<b>3,678</b>	<b>4,311</b>	<b>4,681</b>	<b>42,030</b>

# INFORMATION TECHNOLOGY/EQUIPMENT

## ENTERPRISE INFORMATION TECHNOLOGY

INFORMATION  
TECHNOLOGY/EQUIPMENT  
2017 – 2026 CIP

### Digital Alignment and Citizen Services and Engagement

#### Project Description

The goals of the digital alignment program are to rework internal processes to enhance worker productivity and enable a digital workplace and to encourage digital relationships. As large back office systems develop for a mobile and app focused world, it make sense to revisit the existing Assessment and Collection, Human Resources, Finance, Real Estate and Land Records systems to take advantage of the newly developing marketplace and functionality. Many of these existing systems will be over 10 years old at the time of the planned investment, a lifetime in a technology lifecycle. The concept of sharing information electronically can be expanded to include infrastructure.

Citizen services and engagement should be available anytime, anywhere and through any service devices. The results that we deliver can and should have a significant impact on the citizens of Arlington County. The County is looking to leverage current investments for the benefit of the community. Over time, we will be providing a standard suite of payment options for constituents across all lines of business, with a consistent look and feel, will make it easier for constituents to transact business with their government. This solution will provide customers with a common view of their payment and transaction records. The County will be able to expand its payment options to include more electronic methods to provide self-service opportunities with a uniform look and feel across all agencies. Constituents will have a common method for making payments while agencies will have a standardized back-office approach to manage transactions.

#### Capital Costs during Ten Year Period (FY to FY ) (in \$1,000s)

Projects	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Assessment and Collection (ACE) system replacement	0	2,000	1,000	0	0	0	0	0	1,000	0	4,000
Enterprise Payment System	0	2,000	1,000	0	0	0	0	0	0	0	3,000
Real Estate Assessment System Upgrade	0	0	0	0	0	0	1,000	2,000	0	0	3,000
Land Records	0	0	0	0	0	0	1,000	0	0	0	1,000
Human Resources (HR) system replacement	0	0	0	0	0	0	3,000	2,000	0	0	5,000
Financial system hosting and replacement	0	350	0	0	0	0	3,000	2,000	0	0	5,350
<b>Total Projects</b>	<b>0</b>	<b>4,350</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,000</b>	<b>6,000</b>	<b>1,000</b>	<b>0</b>	<b>21,350</b>

  

Funding Schedule (in \$1,000s)											
New Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
New Bond Issue	0	4,000	2,000	0	0	0	7,000	6,000	0	0	19,000
PAYG	0	350	0	0	0	0	1,000	0	1,000	0	2,350
<b>Total Revenues</b>	<b>0</b>	<b>4,350</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,000</b>	<b>6,000</b>	<b>1,000</b>	<b>0</b>	<b>21,350</b>

# INFORMATION TECHNOLOGY/EQUIPMENT

## ENTERPRISE INFORMATION TECHNOLOGY

INFORMATION  
TECHNOLOGY/EQUIPMENT  
2017 – 2026 CIP

### Worker Mobility

#### Project Description

Being connected and getting things done on the go is the norm today, but many people in the County don't have the ability to work this way. A faster, more proactive government is what people expect today and that requires tools to support mobility. Staff need tools and resources to do their job wherever they need to be. Technology investments are required to support staff in their delivery of services to the constituents. Technology needs to be available to support them internally and externally. As the County continues to promote mobility for staff, there is an increased need for full wireless coverage at County facilities in order for users to remain productive and connected to County resources throughout each site. Constituents, businesses, vendors and partners expect ubiquitous wireless connectivity to the Internet when they are on site at County locations.

#### Capital Costs during Ten Year Period (FY to FY ) (in \$1,000s)

Projects	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Wireless Access Expansion in County Facilities	0	580	320	320	320	540	320	320	320	320	3,360
<b>Total Projects</b>	<b>0</b>	<b>580</b>	<b>320</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>320</b>	<b>320</b>	<b>0</b>	<b>0</b>	<b>3,360</b>

  

Funding Schedule (in \$1,000s)											
New Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Master Lease Financing	0	580	320	0	0	0	320	320	0	0	3,360

# INFORMATION TECHNOLOGY/EQUIPMENT

## ENTERPRISE INFORMATION TECHNOLOGY

INFORMATION  
TECHNOLOGY/EQUIPMENT  
2017 – 2026 CIP

### Emergency Communications

#### Project Description

Currently all the radio towers hardware utilized by ACFD, ACPD, OEM, DES and other departments is currently approaching End-of-Life (EOL). The radio communications enables field agents to communicate with dispatch or a centralized control center during daily operations or during emergency crises. The existing hardware was originally put in place in 2009 and was fully operational by 2011. Because of the known approaching EOL, proactive measure must be taken to replace the hardware and ensure the continued connectivity and reliability of this support infrastructure. The EOL for the core equipment used for the radio ring is April 30, 2019. Due to the complexity, criticality and engineering required, the project is anticipated to begin in April 2017 with a projected completion in April 2018. This allows for a year of service so testing and full deployment can be completed before removing the existing hardware. Suggested replacement hardware is a hybrid solution, which allows for higher bandwidth and low latency which is critical for asynchronous systems such as a radio distribution network. The Enterprise IT program funds the networking hardware for this project which gets the network ready for the new radio hardware that is funded through the OEM capital funds.

#### Capital Costs during Ten Year Period (FY to FY ) (in \$1,000s)

Projects	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Public Safety Network Equipment	500	250	0	0	0	0	0	500	250	0	1,500
<b>Total Projects</b>	<b>500</b>	<b>250</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>500</b>	<b>250</b>	<b>0</b>	<b>1,500</b>

  

Funding Schedule (in \$1,000s)											
New Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Master Lease Financing	500	250	0	0	0	0	0	500	250	0	1,500

# Arlington County, Virginia

## PUBLIC SAFETY INFORMATION TECHNOLOGY/EQUIPMENT: PROGRAM FUNDING SUMMARY

CIP  
2017 – 2026

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

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Fire Department IT and Equipment	2,083	3,078	4,359	3,094	2,743	5,376	2,331	2,645	1,000	1,000	27,709
Office of Emergency Management	4,275	5,300	675	0	2,225	2,000	2,695	7,099	6,403	2,232	32,904
Police Department IT and Equipment	2,273	0	0	800	118	2,341	0	500	1,500	2,118	9,650
Sheriff IT and Equipment	0	375	0	0	382	0	0	3,188	0	0	3,945
<b>Total Recommendation</b>	<b>8,631</b>	<b>8,753</b>	<b>5,034</b>	<b>3,894</b>	<b>5,468</b>	<b>9,717</b>	<b>5,026</b>	<b>13,432</b>	<b>8,903</b>	<b>5,350</b>	<b>74,208</b>

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

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
<b>New Funding</b>											
New Bond Issue	0	0	0	0	2,000	2,000	2,000	2,000	2,000	2,000	12,000
Master Lease	8,631	5,825	5,034	1,861	1,786	4,252	3,026	11,432	6,903	3,350	52,100
Other Funding	0	2,928	0	2,033	1,682	3,465	0	0	0	0	10,108
<b>Subtotal New Funding</b>	<b>8,631</b>	<b>8,753</b>	<b>5,034</b>	<b>3,894</b>	<b>5,468</b>	<b>9,717</b>	<b>5,026</b>	<b>13,432</b>	<b>8,903</b>	<b>5,350</b>	<b>74,208</b>
<b>Previously Approved Funding</b>											
Other Previously Approved Funds	0	0	0	0	0	0	0	0	0	0	0
<b>Subtotal Previously Approved Funding</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Funding Sources</b>	<b>8,631</b>	<b>8,753</b>	<b>5,034</b>	<b>3,894</b>	<b>5,468</b>	<b>9,717</b>	<b>5,026</b>	<b>13,432</b>	<b>8,903</b>	<b>5,350</b>	<b>74,208</b>



## **Fire Department IT and Equipment**

### **Project Description**

The Fire Department mitigates threats to life, property and the environment through education, prevention, and effective response to fire, medical, and environmental emergencies. Services provided include: emergency and non-emergency response to requests for service; inspections, code enforcement, education and community program

### **Project Justification**

The majority of IT assets that are maintained by the Fire Department are used to alert staff to requests for service, respond to and manage critical incidents and maintain critical records. The key IT systems include: the records management system and the fire station alerting system (commonly referred to as Westnet). Key fire equipment and machinery include: fire dispatch vehicles, defibrillators, breathing apparatus, fire command vehicle technology and portable radios.

- The patient defibrillators, carried on all Fire Department response vehicles, allow the Fire Department to treat many medical emergencies using the best technologies available. An example is its ability to monitor critical blood gasses and to transmit critical information directly to hospitals when a patient is diagnosed as having a possible heart attack. This dramatically reduces the time that the victim will need to wait upon arrival at the hospital to get life saving surgery as doctors and specialty care are notified at the earliest possible time of the critical patient's condition.
- Fire Department's Command Vehicle is deployed during critical incidents and special events. Technologies needing refreshment include servers, radios, personal computers, and peripheral devices.
- The Westnet alerting system reduces response time, which is critical to first responders. The faster firefighters begin knocking down a fire, the lesser the chance of flashover. The quicker paramedics begin C.P.R. on a cardiac arrest patient, the better the chance of survival.
- A self-contained breathing apparatus, or SCBA, is a device worn by rescue workers, firefighters, and others to provide breathable air in an "Immediately Dangerous to Life or Health" atmosphere (IDLH).
- Fire portable radios will be replaced in the out years because equipment failure could result in communications delays that increase response time to critical events. When public safety portable radios are replaced, they are transitioned to non-public safety departments for continued use. The replacement cycle for non-Fire portable radios are listed on the OEM IT and Equipment page.
- The Fire Records Management System (FRMS) is the application the Department uses to electronically enter data into the National Fire Incident Reporting System (NFIRS) as required by the Federal Government. The system pulls data from the Computer-Aided-Dispatch system in the ECC in order to track incident and Fire company movements. The system also enables staff to submit incident and company reports electronically.
- The Fire Vehicle refreshment program is an on-going program that refreshes the various emergency vehicles used by the Fire Department. The inventory includes but is not limited to fire pumpers, rescue vehicles, truck lifts and ladder trucks. As fire emergency vehicles reach their end of useful life, they need to be refreshed to continue providing fire operational services. Certain apparatuses include buy-back incentive programs where the County is able to acquire the equipment less the trade-in value for the existing equipment at a lower net cost to the County.

### **Changes from Prior CIP**

From Prior CIP, the schedule for Fire RMS has been delayed

## Fire Department IT and Equipment

<b>Capital Costs during Ten Year Period (FY to FY ) (in \$1,000s)</b>											
<b>Projects</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>10 Year Total</b>
Fire Defibrillators	2,083	0	0	0	0	0	0	2,145	0	0	4,228
Fire Command Vehicle Technology	0	150	0	0	0	133	0	0	0	0	283
Fire Alerting System (Westnet)	0	0	1,061	1,061	1,061	0	0	0	0	0	3,183
Fire Breathing Apparatus	0	0	3,298	0	0	0	0	0	0	0	3,298
Fire Portable Radios	0	0	0	0		1,778	1,831	0	0	0	3,609
Fire Records Management System	0	0	0	0	0	0	500	500	1,000	1,000	3,000
Fire Vehicles Refreshment	0	2,928	0	2,033	1,682	3,465	0	0	0	0	10,108
<b>Total Costs</b>	<b>2,083</b>	<b>3,078</b>	<b>4,359</b>	<b>3,094</b>	<b>2,743</b>	<b>5,376</b>	<b>2,331</b>	<b>2,645</b>	<b>1,000</b>	<b>1,000</b>	<b>27,709</b>
<b>Funding Schedule (in \$1,000s)</b>											
<b>New Funding</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>10 Year Total</b>
General Fund Master Lease	2,083	150	4,359	1,061	1,061	1,911	2,331	2,645	1,000	1,000	17,601
Auto Fund Master Lease	0	2,928	0	2,033	1,682	3,465	0	0	0	0	10,108
<b>Total Revenues</b>	<b>2,083</b>	<b>3,078</b>	<b>4,359</b>	<b>3,094</b>	<b>2,743</b>	<b>5,376</b>	<b>2,331</b>	<b>2,645</b>	<b>1,000</b>	<b>1,000</b>	<b>27,709</b>

## **Office of Emergency Management**

### **Project Description**

The Office of Emergency Management (OEM) is focused on providing the highest level of preparedness for Arlington through an expansion of the County's comprehensive emergency management program as well as full staffing and operation of Arlington's emergency 9-1-1 center. OEM programs include emergency planning, emergency exercises/drills; 24/7 public safety communication, coordination and dispatch; public education; and volunteer management. OEM provides the leadership, coordination, and operational planning that enables the County's response to, and recovery from, the impact of natural, man-made and technological hazards. The majority of IT assets that are maintained by OEM are used to manage the Emergency Communications Center (ECC), the Alternative Emergency Communications Center (AECC) and the Emergency Operations Center (EOC). The key projects include: Public Safety Radios, the ECC Video System, Computer Aided Dispatch Replacement, Next Generation 9-1-1 Enhancements, 9-1-1 Telephone System Upgrades and upgrades to EOC Technologies.

- The Public Safety Radios being recommended for replacement are mobile and portable radios. Police and Sheriff mobile radios are installed in County vehicles and provide two-way communication between the Emergency Communication Center and public safety vehicles. Police and Sheriff portable radios are hand-held radios that allow for two-way communication with the Emergency Communications Center and all public safety agencies throughout the National Capital Region.
- The Emergency Medical Dispatch enhancement allow dispatchers to move through their emergency medical protocols in a streamlined manner, improve operational efficiency, and increases consistency in call entry and accelerates the training cycle while reducing call processing times.
- The Computer-Aided-Dispatch (CAD) system is used to receive requests for service and resource management and transfer information so public safety personnel can effectively respond. All aspects of a CAD system must be optimized for rapid response time and system reliability, which requires refreshment of the system and its components. That refreshment will also be guided by Next Generation 9-1-1, which is the convergence of text, video, and voice technologies to emergency calls for service. In order for 9-1-1 centers to respond to and dispatch information that arrives via new mediums, all technologies that are connected to this system (CAD, Radios, Telephone, etc) will require enhancements, upgrades, and updates to ensure the information is seamlessly transmitted.
- The Emergency Communication's Center Video System is the situational awareness dashboard for the 9-1-1 Center. This integrated system enables multiple IT systems to communicate and project information on various screens throughout the center, to include call information, live video feeds, traffic cameras, and other critical situational awareness tools for dispatchers and Watch Officers. The System is also an integral part of ECC training efforts and is routinely used by Public Safety partners for situational awareness during planned and spontaneous events.

### **Changes from Prior CIP**

The Public Safety Portable radio replacement funding moved from FY18-FY20 to FY17-FY18. These mobile and portable radios are at the end of the useful life and must be refreshed sooner over the next two years. A replacement of the CAD System is included in this CIP with a focus on Next Generation 9-1-1 requirements.

## Office of Emergency Management IT

<b>Capital Costs during Ten Year Period (FY to FY ) (in \$1,000s)</b>											
<b>Projects</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>10 Year Total</b>
OEM Public Safety Mobile Radios	1,220	1,220	0	0	0	0	0	1,257	1,256	0	4,953
OEM Public Safety Portable Radios	3,055	3,055	0	0	0	0	0	3,147	3,147	0	12,404
OEM Emergency Medical Dispatch	0	0	0	0	225	0	0	0	0	232	457
OEM CAD Planning & Replacement	0	350	0	0	2,000	2,000	2,000	2,000	2,000	2,000	12,350
OEM/ECC Video System	0	675	675	0	0	0	695	695	0	0	2,740
<b>Total Costs</b>	<b>4,275</b>	<b>5,300</b>	<b>675</b>	<b>0</b>	<b>2,225</b>	<b>2,000</b>	<b>2,695</b>	<b>7,099</b>	<b>6,403</b>	<b>2,232</b>	<b>32,904</b>
<b>Funding Schedule (in \$1,000s)</b>											
<b>New Funding</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>10 Year Total</b>
New Bond Issue	0	0	0	0	2,000	2,000	2,000	2,000	2,000	2,000	12,000
General Fund Master Lease	4,275	5,300	675	0	225	0	695	5,099	4,403	232	20,905
<b>Total Revenues</b>	<b>4,275</b>	<b>5,300</b>	<b>675</b>	<b>0</b>	<b>2,225</b>	<b>2,000</b>	<b>2,695</b>	<b>7,099</b>	<b>6,403</b>	<b>2,232</b>	<b>32,904</b>

## **Police Department IT and Equipment**

### **Project Description**

The Police Department is focused on reducing the incidence of crime and improving the quality of life in Arlington County by making it a place where all people can live safely and without fear. The primary functions of the Police Department are: patrolling the County; responding to calls for service; detecting, identifying, and arresting perpetrators of criminal offenses; investigating and preparing cases to ensure successful prosecution in court; using intelligence to identify emerging crime trends and terrorist threats; and developing crime prevention initiatives. The majority of IT assets are used to store and communicate data throughout the Police Department and other public safety agencies so that public safety personnel can more effectively respond to and manage critical incidents, investigate and prepare cases for prosecution and manage department resources. The key projects include: Mobile Data Computer (MDC) Infrastructure, Public Safety Network, Command Vehicle Technology, Police/Sheriff Records Management System and a pilot of the Body Worn Cameras.

- The Mobile Data Computer and Infrastructure (MDC) is the hardware, software, servers and vehicle docking stations required for police vehicles to utilize mobile computing technology in the vehicle. These terminals or laptops permit data exchange via wireless technology to the Police, Fire and Sheriff's departments and are located in public safety vehicles. The use of these devices increases the efficiency of information sharing, investigations, records management and all forms of communication.
- The Public Safety Network is the main infrastructure for the public safety Records Management Systems, Computer-Aided-Dispatch and the Mobile Data Computer System.
- The Police Department's Command Vehicle is deployed during critical incidents and special events. Technologies include servers, radios, personal computers and peripheral devices
- The Police and Sheriff Records Management System stores critical response, case and inmate data and is an essential piece of record keeping for the organization.
- The Body Worn Camera project is designed for the County's law enforcement officers to record interactions with the public. Some of the benefits of Body Worn Cameras are increased accountability, resolving officer-involved complaints, improving agency transparency, and improving evidence documentation. The Police department is undergoing a pilot of the program to evaluate its effectiveness and will report on the costs and benefits of the program. The pilot is funded from operating funds as it is being scoped as a service package. Results of the pilot will inform future endeavors of the program which may require future capital dollars in the next CIP.

## Police IT and Equipment

<b>Capital Costs during Ten Year Period (FY to FY ) (in \$1,000s)</b>											
<b>Projects</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>10 Year Total</b>
Public Safety MDCs	2,273	0	0	0	0	2,341	0	0	0	0	4,614
Public Safety Network	0	0	0	800	0	0	0	0	0	0	800
Police Command Vehicle Technology	0	0	0	0	118	0	0	0	0	118	236
Police/Sheriff Records Management	0	0	0	0	0	0	0	500	1,500	2,000	4,000
<b>Total Costs</b>	<b>2,273</b>	<b>0</b>	<b>0</b>	<b>800</b>	<b>118</b>	<b>2,341</b>	<b>0</b>	<b>500</b>	<b>1,500</b>	<b>2,118</b>	<b>9,650</b>
<b>Funding Schedule (in \$1,000s)</b>											
<b>New Funding</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>10 Year Total</b>
General Fund Master Lease	2,273	0	0	800	118	2,341	0	500	1,500	2,118	9,650

# INFORMATION TECHNOLOGY/EQUIPMENT

## PUBLIC SAFETY INFORMATION TECHNOLOGY

INFORMATION  
TECHNOLOGY/EQUIPMENT  
2017 – 2026 CIP

### Sheriff IT and Equipment

#### Project Description

The Sheriff's Office is responsible for the management and operation of the Arlington County Detention Facility and all related correctional responsibilities; providing courthouse/courtroom security and court support services; service/execution of civil and criminal warrants and court orders; transportation of inmates; providing administrative support; as well as management and oversight of the Arlington Alcohol Safety Action Program (ASAP). The majority of IT assets that are maintained by the Sheriff's Office are used to secure the Courts Building and the Detention Facility. Additional IT assets are used to process incarcerated individuals and retain critical records. The key projects include: Live Scan System, In Car Video System, Magnetometers and X-Ray Machines, and the Detention Facility and Courthouse Security Systems.

- The Live Scan and Portable Live Scan systems are automatic fingerprinting systems. State Code requires use of an automated fingerprinting system which is tied to the State Police database and sends fingerprints obtained at the Detention Center to the State Police automatically. Using the system, State Police verifies the identity of individuals within fifteen minutes and can also determine the identity of individuals that provide false names to authorities.
- The in-car camera video system records activities inside and around the Sheriff's Department vehicles. The cameras provide evidence of calls for service. This provides an added layer of protection and accountability for public safety officers and the public.
- The Detention Facility Security System is used to monitor and control access to Detention Facility areas for the protection of staff, inmates and the public. This equipment includes cameras, touch screens that control all doors, alarms and intercoms.
- The Sheriff's Office magnetometers and X-ray machines reside in the Courts Building. These assets screen all visitors to the building for potentially threatening items, and assist in maintaining security in the Courthouse.

#### Capital Costs during Ten Year Period (FY to FY ) (in \$1,000s)

Projects	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Sheriff Live Scan and Portable Live Scan system	0	225	0	0	232	0	0	239	0	0	695
Sheriff In-Car camera	0	150	0	0	150	0	0	150	0	0	450
Sheriff Detention Facility Security system	0	0	0	0	0	0	0	2,500	0	0	2,500
Sheriff Courthouse XRAY/Magnetometer	0	0	0	0	0	0	0	300	0	0	300
<b>Total Costs</b>	<b>0</b>	<b>375</b>	<b>0</b>	<b>0</b>	<b>382</b>	<b>0</b>	<b>0</b>	<b>3,189</b>	<b>0</b>	<b>0</b>	<b>3,945</b>

  

Funding Schedule (in \$1,000s)											
New Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
General Fund Master Lease	0	375	0	0	382	0	0	3,189	0	0	3,945

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

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Year Total
Digital Scan Voting Machines	749	0	0	0	843	0	0	0	949	0	2,541
Behavioral Healthcare EHR	1,375	0	0	0	0	0	0	0	0	0	1,375
<b>Total Recommendation</b>	<b>2,124</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>843</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>949</b>	<b>0</b>	<b>3,916</b>

CATEGORY FUNDING SOURCES (in \$1,000s)

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	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	749	0	0	0	843	0	0	0	949	0	2,541
Master Lease	1,375	0	0	0	0	0	0	0	0	0	1,375
Sanitary District Tax	0	0	0	0	0	0	0	0	0	0	0
Other Funding	0	0	0	0	0	0	0	0	0	0	0
<b>Subtotal New Funding</b>	<b>2,124</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>843</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>949</b>	<b>0</b>	<b>3,916</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	0	0	0	0	0	0	0	0	0	0	0
Other Previously Approved Funds	0	0	0	0	0	0	0	0	0	0	0
<b>Subtotal Previously Approved Funding</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Funding Sources</b>	<b>2,124</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>843</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>949</b>	<b>0</b>	<b>3,916</b>



## **Digital Scan Voting Machines**

### **Project Description**

The Digital Scan Voting machines are needed to process paper ballots in anticipation of the November Presidential Election. Pay As You Go (PAYG) provides for the voting machines needed for the 2016 presidential election. This includes precinct scanners, ballot marking devices, voting booths, and other related electoral equipment and supplies.

## **Behavioral Healthcare Electronic Health Record (EHR)**

### **Project Description**

The electronic health record that supports the Community Services Board (CSB) programs is reaching end of life and requires updates to conform to new mandates, take advantage of new technologies, and transfer the records from the existing system.

DHS manages mental health and substance abuse programs for the CSB. The original software system was installed over 15 years ago and will be reaching degrees of end of support in the coming years. The existing contract expires in FY2019 and DHS must be in a position to negotiate and implement alternatives before that time. DHS is using prior CIP funding to evaluate existing and new CSB operations in preparation and in order to make this investment about change, not simply software replacement. Federal mandates such as Meaningful Use and technology advances for field work or client portals mean changes beyond the over 15 years of evolution that have occurred in CSB operations. The major priority is not anticipated to be selecting a software system -- the market has expanded greatly in recent years -- but the implementation of existing and new CSB operations as well as a secure migration of the existing electronic health records (electronic data and documents).