

Technology Replacement Plan

Capital Expenditures for FY2020

<u>Department/Division</u>	<u>Description</u>	<u>Price</u>
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Library	Wireless Access Points	\$ 22,000
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The Wi-Fi system network has been in place since 2014 when the new Library building opened. Over 30% of our access points are in a failed state. The wireless access points are no longer manufactured necessitating the use of refurbished models, which have a high failure rate. New wireless access points are critical to delivering reliable Wi-Fi services to the Library customers.

Library	Wireless Controller	\$ 20,000
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The Wi-Fi system requires a controller to manage the wireless access points. The controller facilitates all connections to the Wi-Fi network, oversees the guest login process, and provides usage statistics. A new controller is required as the foundation of a new Wi-Fi System at the Library. This is very important to deliver wireless connections to the internet and Library services to our patrons.

Library	File Server	\$ 16,000
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The Library's file server is 8 years old and in need of replacement to ensure that we have reliable hardware and current software. This unit serves all Library staff for critical file storage.

Library	Automatic Book Return #1	\$ 9,500
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The automatic book returns at the Library have been in place since the building opened in 2014. Book return #1 runs on a Windows 7 computer and needs replaced with current hardware and software. Windows 7 is no longer supported by Microsoft and a represents a network security risk.

Library	Automatic Book Return #2	\$ 9,000
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The automatic book returns at the Library have been in place since the building opened in 2014. Book return #2 runs on a Windows 7 computer and needs replaced with current hardware and software. Windows 7 is no longer supported by Microsoft and a represents a network security risk.

Library	Automatic Book Return #3	\$ 9,000
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The automatic book returns at the Library have been in place since the building opened in 2014. Book return #3 runs on a Windows 7 computer and needs replaced with current hardware and software. Windows 7 is no longer supported by Microsoft and a represents a network security risk.

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Library	Firewall	\$ 9,500
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The Library firewall provides security and filtering for our public network. Library patrons utilize approximately 9,000 computer sessions per month. The firewall is 6 years old and in need of replacement.

Library	Firewall Failover	\$ 9,500
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The Library firewall failover is a backup device for the Library firewall. It provides security and filtering for our public network. Library patrons utilize approximately 9,000 computer sessions per month. The firewall failover is 6 years old and in need of replacement.

Copier Fund	Fleet – Canon Copier	\$ 5,500
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This copier is the main networked copier/scanner for the Fleet Division. The current copier will be nearly 10 years old at the time of replacement and has made well over 100,000 copies.

Copier Fund	Animal Control – Canon Copier	\$ 8,486
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This copier is the main networked copier/scanner for the Animal Control Division. The current copier was a hand-me-down, which will be over 15 years old at the time of replacement and has made well nearly 743,000 copies.

Information Technology – IT	Systems Storage-Controller	\$ 25,000
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Information Technology – IT	Systems Storage-Expansion	\$ 20,000
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Information Technology – IT	Systems Storage-Expansion	\$ 20,000
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The existing IBM V3700 Storage Area Network (SAN) controller and expansion units are 6 years old and in need of replacement. The existing V3700 unit provides the foundation for over 70 virtual servers including the server configurations, all applications, and all related systems data. The system is running at almost full capacity and is struggling to meet the needs of the applications it supports.

Information Technology – IT	Off-Site Backup Server	\$ 20,000
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This IBM X3630 server is currently 7 years old. This server is located at an off-site location and stores backup data and system configurations from our production system storage devices. This server is a critical component to our Disaster/Recovery infrastructure and is in need of replacement.

Information Technology – IT	Off-Site Virtual Server	\$ 20,000
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This Lenovo server is currently 4 years old. This is an off-site server that is updated each night with a complete image of our virtual servers (over 100 images). The volume of virtual servers that we support has grown to the point where this server

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can no longer meet the Disaster/Recovery requirements. Note: This server will be reclassified as a Hand-Me-Down and will be used to server another role.

Information Technology – IT	Fire #1/EOC Network Switch #1	\$ 10,000
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Information Technology – IT	Fire #1/EOC Network Switch #2	\$ 10,000
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These two (2) Avaya network switches are the core connection between the 9-1-1 Center, City Hall, and SummitNet which provides all connections to the State of Montana and the outside world/Internet. These switches are arguably two of the most important components in our city network. These switches are 7 years old and in need of replacement.

Information Technology – IT	Planning Network Switch	\$ 8,000
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This 96-Port Avaya network switch supports all of the Planning offices on the 4th floor of the Millar Building. This switch connects directly to the City Hall core network and currently handles all of the internal and external network traffic for the Planning Department. This switch is 6 years old and in need of replacement.

Information Technology – Telephone	City Telephone System	\$400,000
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The City telephone system was purchased in the late 80's and has been upgraded many times with the latest being in 2016. The Avaya (Nortel) CS-1000 is at end-of-life and end-of-support. The replacement project will encompass the replacement of our core telephone system, all remote sites (Airport, BOC, PW-Belknap, Planning, Parks & Rec, MET, etc.), our voicemail system, and all current desktop phones. This will be a large project that will be implemented in several phases over the course of the FY2020 fiscal year. The Central Telephone Services budget has built reserves over many years and will fund this replacement without additional costs to the organization. Savings in projected operational costs will be used to replenish the reserves over the next 5 – 7 years.

Aviation/Transit – MET	DX 12 System Cameras	\$ 14,000
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Aviation/Transit – MET	DVRs for Bus Cameras	\$ 22,500
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Aviation/Transit – MET	DVRs for Van Cameras	\$ 22,500
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All MET Transit Fixed-Route buses and Paratransit Vans are equipped with video recording systems for safety and security. The DVRs, Cameras, and related cabling/equipment were originally installed in 2012. The above 3 items are for the replacement of the aging video systems

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Public Works – Fiscal	RemitPlus Server	\$ 16,000
	This server hosts the RemitPlus Utility Accounts Receivable Software, used for A/R, check scanning, check record keeping, and electronic deposits. In addition, this server functions as a redundant server for installed shared printers. The server is 5 years old and in need of replacement.	
Public Works – Engineering	Canon IR5075 Copier	\$ 15,000
	This high capacity copier/black & white printer is the secondary networked copier/scanner for the Engineering Department. The current copier is 9 years old and has 267,865 prints on it.	
Public Works – Engineering	Leica Robotic Total Station, Controller	\$ 26,000
	Leica Robotic Total Station with Controller (data collector), is used to survey property and City projects. This device is vital to the Engineering Division's work, it give us the ability to survey with only one person.	
Public Works – Engineering	Nikon Total Station DTM-352	\$ 6,000
	Nikon DTM-352 Total Station is the backup survey equipment for the Engineering Division. When the robotic total station was purchased, the Nikon had no trade in value so it was kept for backup.	
Public Works – Water Quality	Factory Talk View SE Primary Server	\$ 7,500
	The Water Treatment Plant uses a Rockwell suite of software for process control and data acquisition, which incorporates a number of servers and client computers. The primary server is required for plant operations. This server is scheduled for replacement in FY2020.	
Public Works – Water Quality	Patch Server	\$ 7,500
	The Water Treatment Plant uses a server in the demilitarized zone (DMZ) of a firewall to improve network security. The DMZ is a special local network configuration that contains and exposes the organization's external-facing computers to the internet. Computers are segregated on each side of the firewall. The patch server receives Operating System (OS) and applications updates from the internet and process computers receive their updates from the Patch Server, thereby never accessing the internet. This server is scheduled for replacement in FY2020.	
Public Works – Water Quality	Electricians Laptop	\$ 5,600
	The electricians at the Water Reclamation Facility must use a ruggedized laptop to use in calibration, configuration, and troubleshooting of equipment in the field. This laptop is made with shock-absorbent materials and is compression-sealed from sand, dust, and fluids. This laptop is scheduled for replacement in FY2020.	

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Public Works – Water Quality	File Sharing Server	\$ 7,500
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The Water Treatment Plant uses a server to share files among operations, maintenance, and lab personnel. This server is also used as a file storage and back-up server. This server is scheduled for replacement in FY2020.

Public Works – Water Quality	Primary Domain Controller	\$ 7,500
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The Water Reclamation Facility uses a server on the Process domain running Active Directory and Domain Name Service (DNS) for network administration of users, groups, and computers. This server is scheduled for replacement in FY2020.

Public Works – Water Quality	Secondary Domain Controller	\$ 7,500
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The Water Reclamation Facility uses a server on the Process domain running Active Directory and Domain Name Service (DNS) for network administration of users, groups, and computers. This is a backup domain controller to the primary domain controller to ensure the active directory (AD) and domain name service (DNS) is available 100% of the time for the process domain. This server is scheduled for replacement in FY2020.

Public Works – Water Quality	Factory Talk View SE Primary Server	\$ 7,500
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The Water Reclamation Facility uses a Rockwell suite of software for process control and data acquisition which incorporates a number of servers and client computers. The primary server is required for operations personnel to facilitate plant operations. This server is scheduled for replacement in FY2020.