City of WHITEWATER		Computer Systems Hardware Replacement Standards Policy			
Owner:	IT Director	Approving Position:	Common Council	Pages:	3
Issue Date:		Revision Date:		Review Date:	
Special Instructions:					

I. PURPOSE

It is the policy of the City of Whitewater to provide computer-related equipment to City employees in a cost-effective and efficient manner, subject to available funding. The purpose of this policy is to provide a clear outline of how and when computer systems and hardware throughout the City should be replaced to avoid interruptions, maximize production value, and maintain operational excellence.

II. POLICY

The City of Whitewater should have a rolling replacement schedule for all electronic devices. It is primarily the responsibility of the Information Technology (IT) and Media Services departments to administer this policy, under the general direction of the City Manager. The Media Services department is responsible for non-surveillance audio and video equipment including conference cameras, television broadcasting equipment, A/V production and editing equipment, and any other equipment used by the department and for communication with the public. In conjunction with the departments in which the devices are used, the IT department is responsible for other equipment including surveillance cameras, servers, computers, laptops, cell phones, printers, and copiers. Some departments such as the Police and Library have specialized equipment outside of the purview of Media Services and IT such as drones, automated license plate readers, and Makerspace equipment. Furthermore, per Criminal Justice Information Services (CJIS) standards, some Police equipment may have an expedited replacement schedule.

III. PROCEDURE

While replacement of computing hardware is an expensive and often labor-intensive process, it is necessary to ensure continuity of the City's business functions. While computers of any age can have hardware deficiencies, older computers are significantly more likely to fail, resulting in lost time, increased employee dissatisfaction, and potentially lost data. The intention of this policy is to provide a clear outline of how and when computer systems are replaced throughout the City to avoid interruptions. Desktop computers should be replaced no less than 5 years and no more than 8 years, and laptops replaced no less than 3 years and no more than 8. The City relies on Microsoft operating systems to conduct its business, and any computer with a non-Windows operating system (Linux, Mac OS, etc.) that needs to be joined to the City's domain requires a business reason as well as written permission from the IT Director. Without such permission, non-Windows computers will not be joined to the City's domain, nor will the IT department service the device.

Servers should be purchased with the intention of providing acceptable performance for no less than 5 years and no more than 10, with the goal of replacement by the sixth year.

The usable lifespans of monitors and other peripheral hardware can vary significantly from the usable lifespan

of a desktop computer. IT permits individual departments to purchase nonstandard keyboard, mice, and speakers for their employees. In the even these nonstandard devices require replacement, IT will only supply standard replacement peripherals, and will require the department head to approve and re-order on an as-needed basis. Standard peripherals are evaluated and replaced as needed whenever a workstation is replaced, or whenever an end user reports a problem via a ticket. IT will strive to accommodate any user with a disability.

Desktop and Laptop Replacement

A. While computer configurations (including operating systems) should remain relatively consistent across the organization to minimize the time required for deployment and maintenance, users needing resource-intensive applications or who frequently utilize large data sets should be given priority access to devices capable or higher performance.

B. Computers should be replaced in the event they are no longer capable to run required software adequately or in a timely fashion. Systems that require replacement earlier than anticipated need to be evaluated and approved by both the department head of the user requesting replacement and the IT Director. Devices may be purchased through institutional funds or grants, if applicable.

C. Replaced devices must be returned to IT for redeployment or decommissioning at the discretion of the IT Director.

D. Because they are both more expensive and less robust, laptops should only be purchased for users who have job duties that require their primary workstations to be portable. The City supports other mechanisms for working remotely.

E. The remaining new and reclaimed devices are then deployed to locations with typical application use with the oldest computers taking the priority for replacement. The replaced computers may then be redeployed (if of usable quality) or disposed (if the devices are in poor quality) of per the discretion of the IT Director.

Server Replacement

A. To maximize compatibility and longevity, servers should only be purchased from top-tier manufacturers providing full support for the expected lifespan of the hardware, and should not contain consumer-grade components such as SATA disks.

B. Because server downtime affects the work of many people at once, resiliency during hardware failure should always be considered. Hot-swappable and redundant components should be purchased whenever possible.

C. Servers should be purchased with at least a five-year hardware warranty and with responses time of at most one business day by the manufacturer or reseller.

IV. REPLACEMENT STRATEGIES

Hardware replacement requires different strategies in different areas to minimize inconvenience for end users. Staff will be given adequate notice prior to workstation replacement, and IT personnel will attempt to work around individual end user schedules. End users are responsible for giving IT staff a list of applications needed, saving their local data is either to a network or portable drive, transferring favorites and bookmarks, and ensuring they have the necessary credentials for their applications. Server replacement typically requires software migration, which often requires an interruption of service. Migrations should take place outside of normal business hours of the affected department(s) and, when feasible, on days that minimize impact to end users. Replacement schedules may be completed earlier if technology and funding opportunities are available.

For every type of device, the City should have a hot spare that can be used in the event of an emergency, but

exceptions can be made for devices that are unique or where cost is prohibitive. In some cases, a device that is replaced in production may become a hot spare rather than being redeployed or scrapped. The purpose of this is to minimize outages and allow staff to source a new device that unexpectedly fails.

V. SCHEDULE

A. Desktop PC: 5 – 8 years

B. Laptop PC: 3 – 5 years (depends largely on use)

C. LCD/LED monitor: 10 – 20 years

D. LCD/LED television: 10 – 15 years

E. Cell phones: 4 – 5 years

F. Server: 5 – 10 years

G. Copiers/office printers: 10 years if owned; leased equipment is replaced every 5 years

H. Network switch: 10 – 15 years

I. Surveillance camera (indoor): 8 – 12 years

J. Surveillance camera (outdoor/humid conditions): 5 – 10 years

K. Surveillance DVR: 5 – 8 years

L. Tablet: 3 – 5 years

M. Police squad vehicle laptop: 4 – 6 years

N. Police body camera: 4 – 7 years

O. Camcorder: 5 – 10 years

P. Desktop laser printers: 5 – 10 years

Q. 3D printers: 5 – 10 years