



Peninsula College 2021 Technology Update & Replacement Plan

OVERVIEW

The Peninsula College Technology Update and Replacement Plan ensures adequate and equitable distribution of technology, timely upgrades, cyclical replacement, and implementation of innovative technologies that support the college mission to educate diverse populations of learners through community-engaged programs and services that advance student equity and success. The college's annual planning process informs technology updates and replacements. Efficiencies are met through the Roll Down program that allows for upgrades to higher-end technology classrooms on a shorter timeline, prior to end of life, and rolls the working equipment down to either labs, learning centers, or offices. For example, in 2021, the high-end multimedia classroom computers were upgraded with new computers then several end-of-life computers in offices and labs were replaced with the multimedia classroom computers.

Computer Lifecycle Process

Replacement of academic computers and multimedia systems are scheduled for five to seven years. Replacement is identified through a current systems inventory, daily wear and tear, Information Technology (IT) Helpdesk tickets, and direct requests from faculty, staff, and students. Student technology fees, a centralized technology computer replacement budget, and a computer lease program support the replacement program. Other technology devices and electronics (e.g., media components, displays and specialized program equipment) are supported by a variety of funding sources including the college's technology replacement cycle budget, department budgets, and grant funding.

Approval Process

Through the annual budget planning process, the technology needs are documented in the Strategic Technology Plan and department annual administrative plans. IT Plan goals are developed and measured through assessments such as feedback from students, staff, and faculty as well as end-of-life support dates, inventory measures, and security requirements. Proposed new technologies are evaluated by IT staff to ensure security, accessibility, and integration. The IT Plan is then submitted to the President's Cabinet for budget consideration and approval. Once procured, new technology is tagged and inventoried. Deployment includes testing and professional development training for users. The budget approval process is flexible to accommodate needs that arise after the final budget allocation process. One example is the college's response to the pandemic. We allocated funds to launch a student laptop loaner program and purchased computers and remote work technologies for faculty and staff.

Procurement

Computer procurement was adjusted during the pandemic to improve efficiencies and avoid purchasing new classroom computers that would sit unused. Instead, the college purchased parts, hard drives, memory, etc. to update and extend the life of existing computers at a lower cost.

Recycling Plan

In coordination with Auxiliary Services, the college recycles computers, printers and electronic devices that are beyond useful service life. IT staff ensure data on the hard drives are removed before salvage and data wiped in accordance with the IT data security procedures.

Replacement Criteria

The process for technology replacement follows the Washington State Technology Policies and Standards that recommend replacement every 7 years to stay within a secure and updated operating system and to support course applications.

Learning Spaces

Computer replacement covers all student and instruction laptops and workstations in technology enhanced classrooms, Library, computer labs, allied health simulation lab, and learning centers. The replacement process is managed by the IT Department informed by a comprehensive inventory and input from Instruction according to the need and a bi-annual student satisfaction survey.

Staff and Faculty

Staff and faculty computers are replaced according to age of the CPU or a request for upgrade. The replacement process is managed by the IT Department, informed by a comprehensive inventory and either centrally funded or replaced through the college's Roll Down program. One desktop computer is supplied to each employee. Any secondary computer (e.g., laptop) is charged to departmental budgets.

INVENTORY AND REPLACEMENT CYCLE

Technology	Count/Size	Cycle	Annual Replacement Goal
Student desktop computers	280	5 - 7 years	2-3 classrooms per year based on age and curricular needs
Student laptops	850	5 - 7 years	Lease program replaces 100 per year
Classroom Instructor Stations	123	5 - 7 years	As needed per software upgrades and curricular needs
Faculty and staff desktop computers	269	6 - 8 years	As needed per software upgrades, professional development, and curricular needs
Faculty and staff laptop computers	115	5 - 6 years	As needed per software upgrades, professional development, and curricular needs
Networked printers	190	Obsolete and security compliance	As needed
Servers Physical Virtual (VMWare)	8 30	10 years	Replaced in 2021. Will replace in 2031
Network storage	15 Terabytes	As needed	2022 network storage will be replaced
Network Core Infrastructure Routers Network switches Firewalls Network appliances Wireless access points Telephones	6 2 30 2 2 187	5 - 10 years 6 - 8 years 8 -10 years As needed As needed As needed	As needed per security compliance standards, annually reviewed
Technology enhanced classroom/rooms (Projectors, computer, DVD/VHS player, media switch, screen)	63	8-10 years	Currently being reviewed for upgrades for hyflex instruction growth based on what we learned from remote teaching and learning
Fiber and telephone/data wiring plant	1	Maintenance as needed. 25 years	Currently reviewing for 2022 upgrade

Replacement Summary

During 2020 and 2021, most classrooms were unoccupied due to remote instruction and work environments, so IT upgrade and replacement projects focused on the college's student loaner laptop program, network infrastructure, and wireless system upgrades.

2020-2021 Infrastructure Upgrades

- 50% of the outdated hardware switching equipment was replaced
- New Meraki wireless system was installed on all three campus locations
- Forks and Port Townsend extension sites were moved into an autonomous network
- Forks and Port Townsend extension sites upgraded to a 1 Gigabit bandwidth pipeline
- Virtualized Server platform upgraded to enhance security and cloud services
- Firewall device upgraded setup for security

2020-2021 Computer Upgrades

200 Computers in the 7+ year Category and monitors and peripherals redirected to support a student laptop loaner program and staff remote offices in response to the pandemic.

Replacement purchases for student computers

- 180 new laptops leased for Replacement Year 1-2
- 20 new computers purchased to upgrade a multimedia classroom
- 50 new instructor computers purchased to support hyflex classrooms
- 70 computers allocated to the Roll Down program

Improvement Planning

The following actions will support the college's efforts to ensure adequacy of the college's technology infrastructure and to prepare for the post pandemic return to campus.

- 1. Continue to implement the update and replacement plan.
- 2. Administer a campus wide IT survey and compare results with 2019 survey results
- 3. Update the current Technology Strategic Plan
- 4. Enhance learning spaces with hyflex and remote learning technologies
- Upgrade cybersecurity procedures and develop a comprehensive digital Continuation of Operations plan
- Develop a visual graphic outline for technology replacement to include all computer equipment, networks, and media equipment such as video cameras, theater, and performance hall technologies.
- Implement a full inventory audit of technology equipment purchased in response to the pandemic