



Southwestern Oregon Community College

Success Indicator 19 Infrastructure Equipment and Software Maintenance | 2014 - 2015

ACHIEVEMENT

Achieved = 73.8%



CORE THEME

Sustainability

OBJECTIVE

S.2: Southwestern builds and maintains a sustainable Infrastructure of human, technology, and facility resources

INDICATOR

S.2.2: Success Indicator 19 – Infrastructure Equipment and Software Maintenance

Measured by the percent of planned expenditures required to replace equipment and software according to the Integrated Technology Replacement Plan compared to the actual expenditures based on a three-year expenditure average from internal reports and general ledger expenditures.

Indicator Thresholds

Green: 85% or greater

Yellow: Between 70% and 84%

Red: Below 70%

Purpose and Meaning

Assists the college administration to determine whether funds expended for equipment purchased are adequate to meet operational and student needs based on planning activities (specifically, the Integrated Technology Replacement plan).

WHAT WAS ACHIEVED AND WHAT IS PLANNED FOR THE FUTURE

The three year average achievement rate was 73.8% for years 2012-13 through 2014-15. The percent of expenditures compared to the ITS replacement plan for 2014-15 was only 55.5%, highlighting the severe cuts to the ITS equipment budget. The continuing practice of deferring equipment purchases is adversely impacting Students, Faculty and Staff. The calculation now includes amounts for reserves needed to meet planned expenditures in future years and attributes to the current red status.

The server farm is heavily virtualized utilizing clustered Microsoft servers as host servers. The host servers and SAN components are included in the equipment lifecycle management plan. Two host servers and a SAN switch were replaced in 14-15. We have realized over \$900,000 in savings by virtualizing our server farm. For the fiscal year July 1, 2014 – June 30, 2015, ITS budgeted and purchased equipment critical to keeping the college technology resources functioning.

- Equipment purchased included 2 servers, 2 SAN switches, 60 replacement pc's, tablets and office equipment for staff and 20 projectors.
- Two host servers and a SAN switch were replaced in 14-15. We have realized over \$900,000 in savings by virtualizing our server farm.
- More VOIP phones are being put into service each budget cycle.
- 20 classroom projectors were replaced with smart projectors.
- The reorganization of the ITS department allowed adding one FTE position to help with frontline support.

Increasing demands for bandwidth and support necessitate planning for future requirements. One gig bandwidth, additional wireless access points, increasing Curry support from ½ FTE to 1 FTE are planned.

FACTORS AFFECTING RESULTS/PROGRESS

Achievement of this indicator is directly impacted by fiscal constraints. The lifecycle equipment replacement plan is not being followed. This is the third year we have deferred purchasing the required amount of replacement equipment. Current Sustainability goals were met by modifying the existing replacement plan, extending years of service of equipment by rebuilding older pc's, and supplementing pc replacements with off – lease, used pc's. Staff workload has increased to support and repair aging equipment.

Success Indicator Changes for 2014-15 supporting NWCCU accreditation standards: 1.B.2; 4.A.1; 4.B.1; 5.B.2

This indicator was reviewed for applicability to Mission Fulfillment, alignment with objectives, and the associated measure including meaning and purpose as part of the ongoing review of the College's core themes and indicators. The threshold level represents the appropriate span adequate to sustain the ITS plan noting the need to make adjustments and dedicate funds when the threshold dips into the red level as well as ongoing yellow level. There are no changes planned associated with this indicator for next year.

Planning Priorities

Strategic Objective – S2: Southwestern builds and maintains a sustainable infrastructure of human, technology, and facility resources

Projects – 2.3: Purchase and implement new or enhance hardware/software

2.14: Funding obtained and technology purchased to meet the needs of the college community

Unit Planning

Collaborate with and gather input from Faculty and Staff to plan future technology needs and directions. Provide a revised technology equipment replacement plan that reflects current and future needs of the college community.

Budget Impact

Budget Impact identifies the budget requests needed in the future year(s) to support the planned changes.

A detailed analysis of Coos and Curry campus technology current and future needs was conducted in 2014. Requirements to maintain the equipment lifecycle and other associated costs require an allocation of \$1.23M per year.

Achievement Analysis

Access to reliable and current technology is dependent on the optimally functioning infrastructure of the college to support student learning in traditional, hybrid and online learning environments. Assessment of these critical systems is determined by performance analysis, throughput and availability. Continuing budget challenges will result in unallocated expenditures when older equipment fails, becomes unusable or has a negative impact on students, faculty and staff.

ITS is employing stopgap measures to maintain a minimally acceptable level of equipment usability. Used off lease equipment is being purchased instead of new. Older pc's are being refurbished, trying to extend their usefulness.

The addition of reserves as part of the achievement calculation for this indicator allows the college to budget for future planned expenditures in an effort to avoid the unallocated expense associated with a major failure of critical equipment that impacts the entire college. Emergency situations always cost more for procurement, delivery, installation and configuration than planned equipment replacement. The current expenditure of 55.5% of planned ITS replacement items cannot be sustained long-term. Extending the lifecycle of old equipment affects reliability, productivity and increases the need for additional technical support.

Success Indicator 19 Integrated Technology Services Equipment Replacement

Measured by the percent of equipment replaced according to the Integrated Technology Replacement Plan
Replacement plan being revised to reflect the network refresh project and server virtualization,

	FY11-12	FY12-13	FY13-14	FY14-15
232 PC Computers 5 year plan	\$ 192,000.00	\$	\$	\$
100 Off lease pcs / upgrades		\$ 50,000	\$ 50,000	\$ 50,000
SAN disk array Shelves and Tape Library - 6 year plan	\$ 31,000	\$ 31,000	\$ 31,000	\$ 31,000
7 physical Servers - 6 year	\$ 60,000	\$ 60,000	\$	\$
4 Host servers – 2 year			\$ 75,000	\$ 50,000
Edge Switches 9 year	\$ 32,400	\$	\$	\$
Core distribution switches 10 year	\$ 15,000	\$	\$	\$
20 wireless access points - 4 year	\$ 40,000	\$	\$	\$
Network Equipment Reserve				\$ 90,000
Media Equipment replacement				\$ 20,000
Total needed for replacement plan	\$ 370,400	\$ 141,000	\$ 156,000	\$ 241,000

IT Expenditures				
Fund 10 53171	195,186	18,360	49,161	69,873
Fund 10 57010		22,495	17,913	
Fund 10 57020	0	43,094	25,370	40,638
Fund 25 53171	110,271	32,330		
Fund 25 57020	0	0	37,622	
Fund 10 2103				23,147
Total spent on new Equipment	305,457	116,279	130,066	133,637

Percent of General fund and Special Project equipment dollars spent on IT replacement equipment

Threshold Range 70%- 100%	67.6%	82.5%	83.4%	55.5%
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Green 85% - 100%
Yellow 70% - 84%
Red below 70%

Three-year average **73.8%**

DATA DOCUMENTATION

Documentation Posted:

Portal: Resource Center Core Themes – Objectives – Success Indicator Page:

https://mylakerlink.socc.edu/ICS/icsfs/SI_19_EquipmentSoftware_2014_2015.pdf?target=690eb1e0-376a-45b1-b5c9-17367c231c26

Assessment Software: Success Indicator 19 Report – execute report for specified year

Data References:

General ledger reports tracking equipment and expenditures: Documents located on the network at:
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ABOUT THE DATA

The report and table information was prepared and coordinated by Rocky Lavoie, Director of Integrated Technology Services and Robin Bunnell, Institutional Researcher.

Contributions to the narrative were supplied by Rocky Lavoie, Director of Integrated Technology Services.

DETERMINING MEASUREMENT AND SETTING THRESHOLD LEVELS

How to measure this indicator was determined by looking at our equipment replacement plan. ITS has maintained an inventory of Student, Faculty and Staff equipment. Technology equipment has a Life Cycle replacement or upgrade factor that is measured by purchase date, warranty and technological capabilities. ITS expenditures are calculated to keep current hardware capabilities adequate to serve the needs of the college. A three-year average figure was chosen to stabilize fluctuations from year-to-year that may occur with an influx of grant funds and/or from economic conditions that impact revenues. Additionally, changes in technology demands from year-to-year impact the planned expenditures as new and improved technology becomes available. The thresholds were set by analyzing the impact of reduced expenditures upon a minimum requirement associated with the Life Cycle replacement noting that in any given year reduced expenditures of 15% was adequate to meet the technology needs on a short term basis and due to the consistent flow of grant funds. The red threshold was set by the same method at the point where a severe impact upon the reliability of technology required to operate the college to support students, faculty and staff would occur including reduced productivity and downtime due to inoperable equipment. Future measurements will return to actual requirements for technology expenditures to maintain a 5 year life cycle replacement plan.

Requirements

NWCCU Accreditation; Mission Fulfillment; ITS Plans.

For more detailed information, contact the Institutional Research office - ir@socc.edu