**Unit Strategic Plan**

**2021 - 2023**

Every two years, during the spring semester, programs/departments/service units are asked to develop Unit Strategic Plans. These plans need to be closely aligned with the Institutional Action Priorities, the College’s Long-Range Goals, and the College’s five-year strategic plan. The Strategic Plans incorporate and reflect the operation of that unit at all campuses and instructional sites. Each unit’s budget needs to reflect the financial implications associated with the unit’s identified goals and objectives.

**Name of Program/Department:** Information Technology

**Mission Statement (for the program or department):**

The primary purpose of the Information Technology (IT) department is to support and promote the effective integration of technology into college practices to maintain highly effective, reliable, secure, and innovative information systems that support instructional, administrative, student services, and institutional effectiveness. IT will select, design, and implement solutions designed to meet the business and instructional needs of the College.

**Summary of Access, Productivity, and Effectiveness (Including, but not limited to, program load, success rate, retention rate, completion rate, employer surveys, and student surveys):**

The review of support logs quantifies the outcomes of the IT department. The effectiveness and weaknesses in the mission of the IT department will be dependent on the analysis of the data. User requests and complaints have been analyzed and divided into areas of support.

|  |  |  |
| --- | --- | --- |
|  | 2019-2020 | 2020-2021 |
|  |  |  |
| Reports | 74 | 12 |
| Service Requests | 5221 | 6226 |

**Internal Conditions:**

The accomplishment of the IT mission is dependent on the budgeting of additional staff to cover the College’s geographical expansion and increased enrollment. The need for additional and replacement of equipment will provide the infrastructure to meet the critical technology needs of the College.

1. **Technology**
	1. Changing technology trends will always be a challenge for the IT department.
2. **Budget**
	1. The completion of proposed projects is dependent on the availability of funding.
3. **Staffing**
	1. Due to increasing technology changes and experienced personnel leaving the college, additional staffing is needed to adequately support the functions of the College for reporting and business analysis. Personnel requests are addressed in the strategic plan.
4. **Resources**
	1. The reorganization of some multimedia assets in the area has expanded some of the resource responsibilities of the IT department. Resources needed are addressed in the Strategic Plan.
5. **Enrollment**
	1. Changes in enrollment are a key driver in the staffing & resources necessary to meet the service level requirements, however, the changes do not have a significant impact.
6. **Facilities**
	1. Facilities and related infrastructure are adequate. The IT department must continuously evaluate the facilities and infrastructure to ensure it supports the College’s technical requirements. Some wiring infrastructure changes are addressed in the Strategic Plan.
7. **Equipment**
	1. Equipment needs are addressed in the Strategic Plan.

**External Conditions** (such as state funding, accrediting agencies, advisory committees, and postsecondary policy changes):

1. **State Funding**
	1. The availability of funds for the proposed projects will be dependent on the level of state funding received for the fiscal years.
2. **System Office Technology initiatives**
	1. Any new technology initiatives mandated by the system office must be evaluated to determine the impact on the College’s technology strategic plan.

**Unit Goals (2021-2022):**

**Mission Statement:**

The primary purpose of the Information Technology (IT) department is to support and promote the effective integration of technology into college practices to maintain highly effective, reliable, secure, and innovative information systems that support instructional, administrative, student services, and institutional effectiveness. IT will select, design, and implement solutions designed to meet the business and instructional needs of the College. To achieve its stated purpose, the IT Department is committed to the following:

**Goal 1:** Expansion of wireless access across all campuses.

**Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** Expansion of wireless access to provide a dedicated wireless access point (AP) in most instructional spaces, including classrooms and open areas. With an increasing emphasis on BYOD, as well as the acquisition of student loaner laptops, increasing the footprint and capacity of wireless coverage is a must.

**Method of Assessment:** At the end of 2020 there are approximately 110 wireless APs in service on the college’s network. The goal would be to increase this number to over 300 wireless APs.

**Estimated Cost:** $150,000

**Goal 2:** Continuing upgrades to the network physical plant.

**Outcome: Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** The existing 1 Gigabit fiber connectivity to the campus PD and O/M buildings has been breached by water (this is evident in the campus PD building with the water repellent inside the fiber optic cable being visibly pushed out). This fiber run should be replaced with a 10 Gigabit single mode fiber and new fiber endpoints to service these two buildings.

**Method of Assessment:** If the fiber run has been replaced between the data center and the two external buildings then this goal will be completed.

**Estimated Cost:** $50,000

**Goal 3:** Distribution of 1200 plus student laptops.

**Outcome:** Service Unit Outcome #4, Evaluate and implement new innovative information systems that enhance technology for Jefferson State students, faculty, and staff.

**Objective:** ACCS has provided the college with approximately 1230 laptops via CARES Act funding. These laptops are intended to be distributed to students to assist with distance learning. These devices are enrolled and managed by the college’s Office 365 tenant, which streamlines device management for the distribution of this size. In addition to distributing the laptops each semester directly to students, the devices can also be used for instructional purposes. The idea is to purchase charging carts for a subset of the laptops and make them available for instructional programs such as nursing.

**Method of Assessment:** This will be an ongoing process – distributing laptops each semester to the student population. If laptops are being requested and assigned to students each semester and if laptop carts are provided for instructional purposes this goal will be completed.

**Estimated Cost:** $25,000 (for 4 to 6 laptop carts)

**Goal 4:** Continuing upgrades and updates to network infrastructure.

**Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** The current network infrastructure requires a lifecycle refresh of 15 to 20 switches per year. A refresh cycle of UPS units is also needed to protect the infrastructure in the networking closets.

**Method of Assessment:** If 20 edge switches are purchased and installed, along with 10 UPS units, then this goal will be completed.

**Estimated Cost:** $110,000 ($100,000 for switches and $10,000 for UPS units)

**Goal 5:** Migration of college portal from on-premises to cloud.

**Outcome:** Service Outcome # 3, Support critical institutional systems and projects, including Oracle and all Banner systems (including Finance, Human Resources, Student, and Financial Aid systems).

**Objective:** The current Ellucian portal is nearing the end of its life. A migration of the current portal to the college’s Office 365 tenant should be carried out. This will enhance the reliability of the portal as well as security where access is concerned due to the use of MFA in Office 365.

**Method of Assessment:**  A successful migration of the college’s portal from the current on-premises Ellucian product to the SharePoint product in the Office 365 tenant will show the completion of this goal.

**Estimated Cost:** None.

**Goal 6:** Reallocation of personnel to improve instructional technology-related support.

**Outcome:** Service Unit Outcome #1, IT will streamline practices to create efficiencies and economize resources to meet the growing technological needs and demands of the College. This will improve the delivery of system administration and information access.

**Objective:** The current personnel situation at the Shelby campus has Greg McCallister performing the duties of a technical support specialist instead of his actual job description of instructional support. With the recent change in positions within the department (a programmer/analyst position being reclassified to a support technician position), a new employee should be hired to help provide desktop support for the Shelby/Clanton campuses and Greg should have duties reassigned that are more in line with instructional technology support.

**Method of Assessment:** If a new support technician is hired for the Shelby campus and Greg is relocated to the Jefferson campus (where he can focus on instructional technology systems) then this goal will be completed.

**Estimated Cost:** None.

**Goal 7:** Implement a new IT help desk system.

**Outcome:** Service Unit Outcome #1, IT will streamline practices to create efficiencies and economize resources to meet the growing technological needs and demands of the College. This will improve the delivery of system administration and information access.

**Objective:** The current help desk system is a local system based on older technology, which has several limitations. A move to a cloud-based help desk ticketing system will provide better availability and enhanced features to help support end users (e.g., remote support assistance, and comprehensive knowledgebase). This will streamline the end-user experience when requesting support from IT as well as other areas of the college.

**Method of Assessment:** If the existing IT help desk system is migrated from on-premises to a cloud-based system, then this goal will be completed.

**Estimated Cost:** $10,000 (annually).

**Goal 8:** Refresh all faculty and some staff devices.

**Outcome:** Service Unit Outcome #1, IT will streamline practices to create efficiencies and economize resources to meet the growing technological needs and demands of the College. This will improve the delivery of system administration and information access.

**Objective:** With the recent emphasis on distance learning due to Covid-19, all faculty and many of the staff need to have a mobile device provided by the college. CARES Act funding has provided the ability to purchase 200 new laptops for all full-time faculty and some other full-time employees.

**Method of Assessment:** This is an ongoing project which will be scheduled according to the device needs of full-time faculty and staff. If 100 of the devices have been distributed over the next 12 months, with plans to continue their deployment going forward then this goal will be considered complete.

**Estimated Cost:** $250,000.

**Goal 9:** Backup Internet service at the Shelby campus.

**Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** A backup Internet Service Provider is needed for the Shelby campus.

**Method of Assessment:** If a backup Internet connection is installed at the Shelby campus then this goal will be considered completed.

**Estimated Cost:** $12,000 (annually).

**Goal 10:** Department Supplies, Training, and Personal Computers.

**Outcome:** Service Unit Outcome #1, IT will streamline practices to create efficiencies and economize resources to meet the growing technological needs and demands of the College. This will improve the delivery of system administration and information access

**Objective:** The IT department requires personal computer replacements, network supplies, technician tools, and a training/travel budget. Four employees require computer replacements. All four technicians require tool replacement kits. Training for development needs to expand for professional development.

**Method of Assessment:** The College will have purchased the resources and provided professional development training over the entire year.

**Estimated Cost:** $25,000.

**Goal 11:** Updates and upgrades to Active Directory and core network services.

**Outcome:** Service Outcome # 3, Support critical institutional systems and projects, including Oracle and all Banner systems (including Finance, Human Resources, Student, and Financial Aid systems).

**Objective: T**he current Active Directory (AD) infrastructure needs to have the functional level upgraded from the current Server 2008 level to a Server 2016 level (at a minimum). The current configuration of the Active Directory includes deprecated and unsupported technologies. Vendor assistance will be required to ensure a smooth upgrade process with little to no downtime for end users. This upgrade will also ensure future compatibility with integrated systems such as ACCS Banner and Office 365 AAD.

**Method of Assessment:** A successful upgrade of the college’s AD infrastructure to the Server 2016 level will complete this goal.

**Estimated Cost:** $10,000

**Unit Goals (2022-2023):**

**Goal 1:** Implementation of MFA for ACCS Banner access.

**Outcome:** Service Outcome # 3, Support critical institutional systems and projects, including Oracle and all Banner systems (including Finance, Human Resources, Student, and Financial Aid systems).

**Objective:** ACCS will mandate multifactor authentication (MFA) to access Banner Admin pages. This mandate will enhance network security regarding administrative system access.

**Method of Assessment:** A successful rollout of MFA to end users in conjunction with ACCS will complete this goal.

**Estimated Cost:** None.

**Goal 2:** Migration of phone system to the cloud.

**Outcome:** Service Unit Outcome #6, IT will provide and maintain a reliable telephone system.

**Objective:** Migration from the on-premises Avaya IPO phone system to Avaya Cloud Office (ACO) phone system.

**Method of Assessment:** If a successful migration of the on-premises phone system on all four campuses occurs to ACO occurs within the next 12 months, then this goal will be completed.

**Estimated Cost:** $85,000 annually.

**Goal 3:** Network upgrades and wireless AP refresh.

**Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** The normal lifecycle of the closet switch and wireless AP replacement is required. An annual purchase of 20 switches and 50 APs are required to stay current with the evolving network standards.

**Method of Assessment:** If 20 network edge switches are refreshed along with the replacement of the 50 205 models wireless APs, then this goal will be completed.

**Estimated Cost:** $150,000 ($100,000 for switches and $50,000 for wireless APs).

**Goal 4:** Upgrade Internet connectivity at the Pell City campus.

**Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** A new Internet Service Provider is required at the Pell City campus due to increased demand for network bandwidth. The provider must be able to provide Internet connectivity at speeds of up to 1 Gigabit. The current provider can only offer speeds of up to 100 Megabits.

**Method of Assessment:** Installation and configuration of a new ISP at the Pell City campus will complete this goal.

**Estimated Cost:** $18,000 annually.

**Goal 5:** Upgrade of core routers at Shelby, Pell City, and Clanton campuses.

**Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** These four core routers are all end of life and nearing the end of support. Due to lingering procurement issues related to Covid-19, this goal has been moved ahead to next year.

**Method of Assessment:** Receiving, installing, and configuring these devices will result in the completion of this goal.

**Estimated Cost:** $250,000.

**Goal 6:** Upgrade of SAN

**Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** The current SAN is at the end of its life and nearing the end of support. The existing device needs to be replaced with one that is similar in features and size. This will ensure that critical VM systems remain online and functional.

**Method of Assessment:** Successful installation of a new SAN into the data center will complete this goal.

**Estimated Cost:**  $65,000

**Goal 7:** Continuing upgrade of fiber optic network infrastructure

**Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** The current multimode fiber plant is both outdated and fiber pairs have deteriorated. The continued upgrade of the old multimode fiber to new single-mode fiber should continue primarily at the Jefferson campus (specifically LWH, BDH, RCB, and GLB). This would provide for future growth over the next two decades.

**Method of Assessment:** If the estimated budget is spent and 4 buildings are capable of connecting at a 10 Gigabit speed then this goal will be completed.

**Estimated Cost:** $100,000

**Goal 8:** Upgrade and update IP Phones.

**Outcome:** Service Unit Outcome #6, IT will provide and maintain a reliable telephone system.

**Objective:** In conjunction with Goal #2, all IP phones should be replaced when the telephone system is migrated to the cloud.

**Method of Assessment:** If all current IP phones are replaced with newer phones (approximately 500 units across four campuses), then this goal will be completed.

**Estimated Cost:** $125,000

**Goal 9:** Network and Datacenter Physical Security

**Outcome:** Service Unit Outcome #2, IT will provide reliable and secure access to the institution’s network which includes critical systems and data. This objective will establish scalability that will meet the future networking needs of the College.

**Objective:** All the doors to the network and data center need monitoring and improved physical security. Either the replacement of all the systems to a common key, manual keypad, or network-connected card system needs to be investigated and a proposal made to unify and replace all of them.

**Method of Assessment:** If the physical security of all locations is improved then this goal will be completed.

**Estimated Cost:** $25,000

**Goal 10:** Department Supplies, Training, and Personal Computers

**Outcome:** Service Unit Outcome #1, IT will streamline practices to create efficiencies and economize resources to meet the growing technological needs and demands of the College. This will improve the delivery of system administration and information access

**Objective:** The IT department requires personal computer replacements, network supplies, technician tools, and a training/travel budget. Four employees require computer replacements. Tools and office supplies need replacement regularly. Training for development needs to expand for professional development.

**Method of Assessment:** The College will have purchased the resources and provided professional development training over the entire year.

**Estimated Cost:** $25,000