2024-2025 IT Master Plan Executive Summary

SINCLAIR COLLEGE | SEPTEMBER 1, 2024



APPLICATIONS • OPERATIONS • SECURITY • SYSTEMS



TABLE OF CONTENTS

Fast Facts	1
Welcome	2
Plan Summary	4
Plan Details	6
Projects by Initiative	7
Renewal/Replacement Budget	10
Appendix 1: Sinclair IT	11
Key Performance Measures	11
Charter	13
High-Level Responsibilities	13
Organization Structure	14
Strategy	14

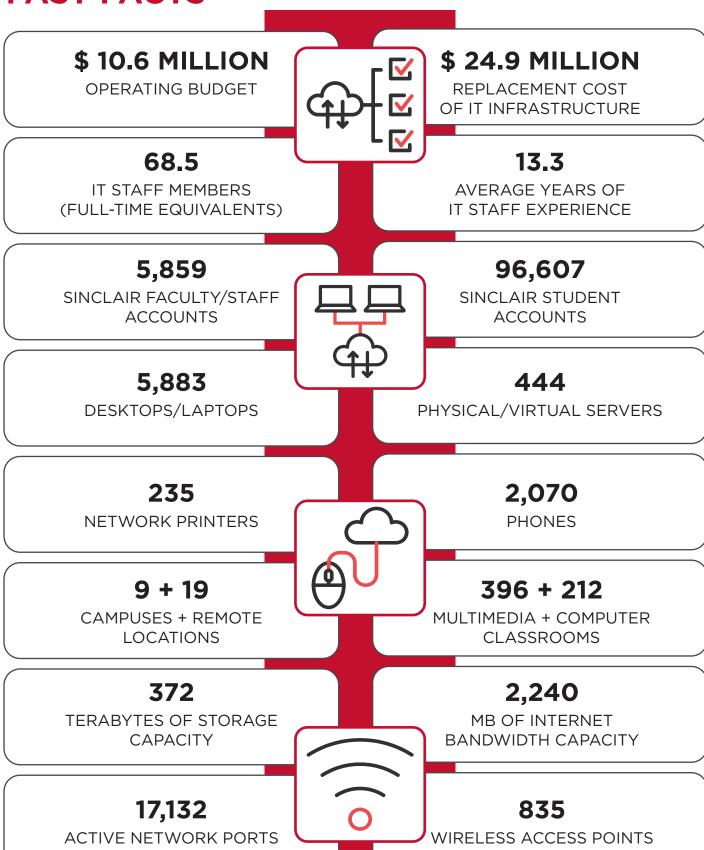
Prepared By:

Scott McCollum Chief Information Officer scott.mccollum@sinclair.edu

©2024 by Sinclair Community College 444 West Third Street, Dayton Ohio 45402 www.sinclair.edu

All Rights Reserved. No Reproduction or Redistribution Without Written Permission

FAST FACTS



WELCOME



Scott McCollum
Chief Information Officer (CIO)

Welcome to Sinclair's IT Master Plan, a strategic blueprint for navigating the rapidly evolving landscape of Information Technology. IT services at Sinclair have been evolving for many years, but this transformation has accelerated significantly over the past decade. Central to this evolution are the rapid advancements and increasing adoption of both virtualization and cloud technologies, which have fundamentally reshaped how we manage infrastructure, deliver services, and structure our operations. This plan outlines our commitment to leveraging these technologies to enhance our capabilities, ensure robust security, and foster an environment of continuous innovation. Together, we will continue to build a more connected, secure, and forward-thinking college community.

Virtualization has played a pivotal role in optimizing our oncampus infrastructure. By enabling the creation of multiple virtual environments on a single physical server, virtualization has allowed us to maximize the utilization of our hardware, reduce physical space requirements, and lower energy consumption. This technology has provided us with greater flexibility in managing workloads, improving disaster recovery capabilities, and simplifying the maintenance of our systems. Virtualization has also been a crucial steppingstone toward our broader adoption of cloud technologies, as it laid the groundwork for more dynamic and scalable IT environments.

Complementing virtualization, cloud systems have further reduced our reliance on physical infrastructure by shifting many of our operations to cloud-based solutions. This transition has led to lower maintenance costs, increased operational flexibility, and a significant reduction in on-campus hardware. Additionally, cloud systems typically utilize subscription-based licensing models rather than requiring large capital expenditures for hardware and software purchases. This shift from upfront investments to ongoing operational expenses provides greater financial flexibility, allowing us to scale our resources up or down as needed without the burden of significant capital outlays. However, the move to cloud and virtualized environments introduces new challenges in budgeting and financial planning. Unlike traditional capital expenditures, which are generally predictable and planned well in advance, ongoing operational expenses tied to these technologies can fluctuate based on usage patterns, service demands, and evolving needs. This variability can make it more difficult to forecast costs accurately, potentially leading to budgetary pressures if usage spikes unexpectedly or if additional services are required to meet new demands.

Both cloud and virtualized systems can often be easier to deploy and maintain, as they reduce the need for extensive on-premises infrastructure. However, while these solutions may appear simpler to manage, they require significant effort behind the scenes to create and manage integrations with other systems. Ensuring that cloud and virtual environments seamlessly interact with each other and with our existing infrastructure involves complex configurations, data alignment, and rigorous security protocols.

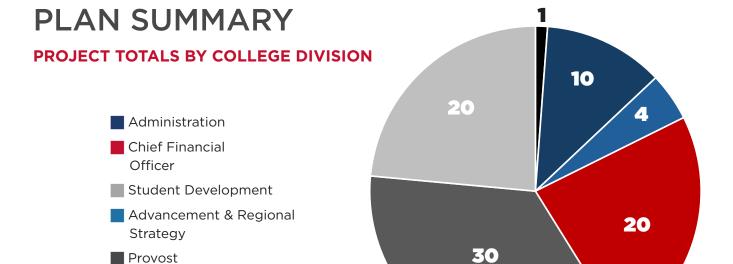
These integrations are essential for maintaining a cohesive digital environment across the college, enabling us to deliver comprehensive and reliable services to our students, faculty, and staff.

As we continue to navigate this era of cloud and virtualization, we must continuously develop new skills and align our resources in the most optimal way to meet evolving demands. Traditional IT roles, once centered around managing physical on-premises systems, are evolving to emphasize expertise in cloud computing, virtualization management, application programming interfaces, artificial intelligence, and cybersecurity. We are committed to upskilling our team, fostering a culture of continuous learning, and ensuring that our resources are deployed where they can have the greatest impact. This strategic alignment allows us to maximize our capabilities, improve our service delivery, and maintain the agility needed to adapt to future technological changes.

Our strategic IT priorities for the next 3 to 5 years reflect our commitment to navigating these changes while ensuring that the college remains at the cutting edge of technological innovation. Enhancing cybersecurity, refining our learning environments, and leveraging AI for sustainable development are key components of our strategy. Yet, at the core of these initiatives is our focus on effectively managing the complex integrations that make both cloud and virtualized systems work seamlessly within our broader IT ecosystem.

Our guiding principles—innovation, security, collaboration, and enterprise value—continue to drive our efforts. By adhering to these principles, we are confident in our ability to deliver long-term value to the college, ensuring that our IT infrastructure is not only equipped for today's challenges but also prepared to support the college's future aspirations.

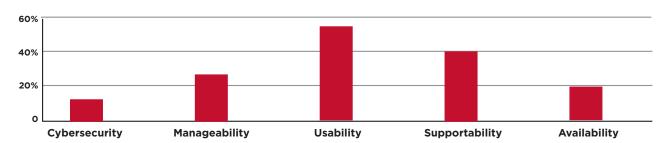
Welcome to this new chapter in our IT journey. Together, we will build a more connected, secure, and innovative future for our college community, navigating the complexities of cloud and virtualization integration with the expertise and foresight that define our approach to technology leadership.

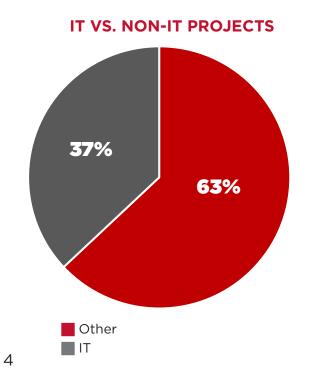


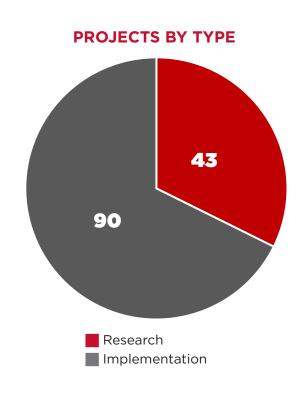
TECHNOLOGY IMPROVEMENTS FROM PROJECTS INCLUDE

Workforce Development

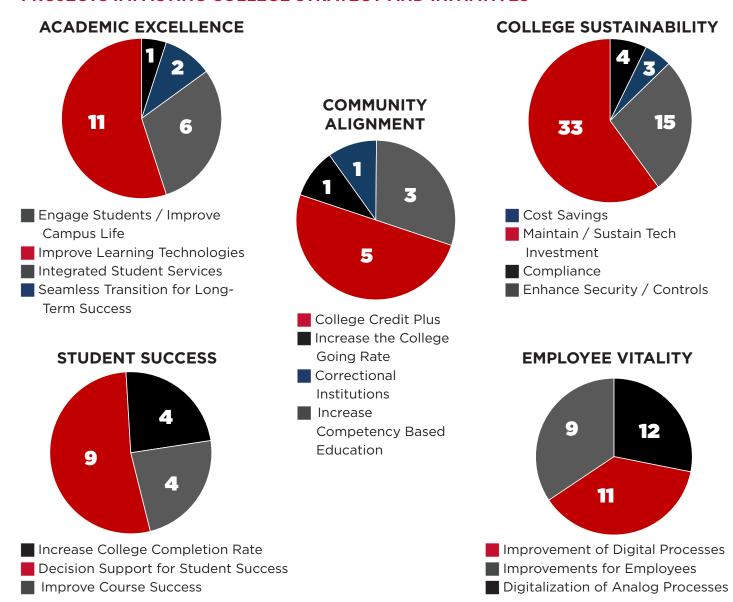
& Consulting







PROJECTS IMPACTING COLLEGE STRATEGY AND INITIATIVES



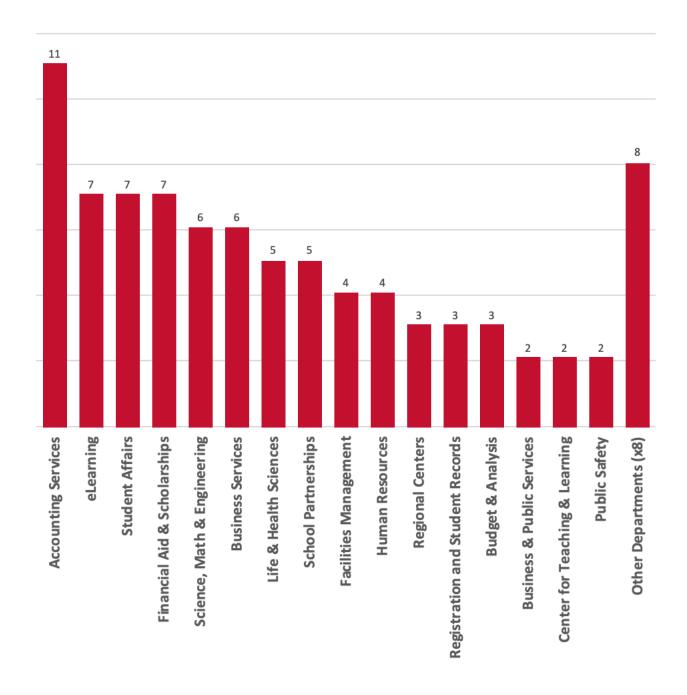
SAMPLING OF TOP PROJECTS

PF	ROJECT	STRATEGY
1.	my.Sinclair Governance	Academic Excellence
2.	LER/Microcredential Research	Academic Excellence
3.	Applicant Fraud Prevention	College Sustainability
4.	Incident Response/Tabletop Exercise	College Sustainability
5.	CCP Portal Enhancements	Community Alignment
6.	AJT Billing & Reporting	Community Alignment
7.	Faculty Performance Evaluation	Employee Vitality
8.	Automate Employment Processes	Employee Vitality
9.	EAB Navigate Implementation	Student Success
10	. Coaching to Complete Data in Oneview+	Student Success

PLAN DETAILS

PROJECTS BY DEPARTMENT

SUMMARY (EXCLUDES INTERNAL IT PROJECTS)



Project List 2024-2025

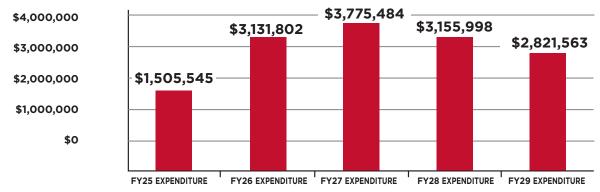
PROJECT ID	PROJECT NAME	DEPARTMENT	PROJECT TYPE
ITMP-804 ITMP-835 ITMP-897	CREDIT PLUS Update School Partnerships Software CCP Billing & Reporting CCP Portal Enhancements	School Partnerships Accounting Services School Partnerships	Implementation Implementation Implementation
COMPLIAI ITMP-810 ITMP-811 ITMP-859 ITMP-901	Applicant Fraud Prevention Transition Adobe Acrobat Pro Licensing SAP Process Improvement Security of Campus Police Systems	Financial Aid & Scholarships Information Technology Financial Aid & Scholarships Public Safety	Implementation Implementation Implementation Implementation
CORRECT IITMP-836 ITMP-911	IONAL INSTITUTIONS AJT Billing & Reporting AJT Database Improvements	Accounting Services AJT/Returning Citizens	Implementation Research
COST SAV ITMP-826 ITMP-851 ITMP-872	INGS Migrate Virtual Desktop Environment Inclusive Access Implementation Tech Prep Portal Enhancements	Information Technology Business Services School Partnerships	Implementation Implementation Implementation
ITMP-805 ITMP-838 ITMP-844 ITMP-845 ITMP-870 ITMP-871 ITMP-873 ITMP-885	SUPPORT FOR STUDENT SUCCESS OneView+ Updates for EAB content EAB Navigate Implementation Electronic Forms for RAT Program Clinical Evaluation Tool Lab Sign-in/Sign-out Application My.Sinclair Student Activity Portlet Enhance Franklin Pathway Integration Coaching to Complete Data in OneView+ Case Management and Counseling Solution	School Partnerships Academic Advising Life & Health Sciences Life & Health Sciences Life & Health Sciences Admissions Financial Aid & Scholarships Student Affairs	Implementation Implementation Implementation Implementation Implementation Implementation Research Research Implementation
DIGITALIZ IITMP-768 ITMP-807 ITMP-818 ITMP-819 ITMP-829 ITMP-830 ITMP-880 ITMP-883 ITMP-883 ITMP-884 ITMP-885 ITMP-887 ITMP-898 ITMP-912	ATION OF ANALOG PROCESSES Automate Name Change Process Facilities "Hot Work Permit" Form Scheduling Software Payroll Integration Operating Budget Application Position Management Past Due Collections Payroll Integrations Self-Service Graduation Application Donor Assessment Form Facilities Non-Capital Request Form CCP Student Repeat Registrations eLearn Staff Enrollment	Information Technology Facilities Management Public Safety Budget & Analysis Budget & Analysis Accounting Services Accounting Services Reg and Student Records Student Affairs Facilities Management Student Affairs eLearning	Implementation Implementation Discovery Research Research Implementation Research Implementation Implementation Implementation Research Research Research Research
	Digital Room Signage Advanced IT & Computing Center Dual Display Classrooms R&R Televisions and Monitors Parking Lot Utilization my.Sinclair Governance	-	Research Research Implementation Implementation Research Research

ENHANCE	SECUDITY / CONTROLS		
ENHANCE ITMP-775 ITMP-780 ITMP-821 ITMP-823 ITMP-825 ITMP-827 ITMP-840 ITMP-854 ITMP-855 ITMP-864 ITMP-865 ITMP-908 ITMP-913	Security / CONTROLS Secure Colleague File Upload R&R Security Camera Systems Network Performance Monitoring Connectivity Request Workflow Enhance Windows Update Process Cloud-Based Device Management Security Camera Network Enhancements Disaster Recovery Updates End User Computing Equipment Inventory Incident Response/Tabletop Exercise Security Operations Center Zero Trust Security Architecture Improve Microsoft Logging MS365 Change Approval	Information Technology Facilities Management Information Technology Business Services Business Services Information Technology Information Technology Information Technology Information Technology Information Technology Information Technology	Implementation Implementation Research Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Research Research Research Implementation
ITMP-914	Microsoft Copilot	Information Technology	Implementation
IMPROVE ITMP-774 ITMP-816 ITMP-858 ITMP-884	COURSE SUCCESS Update class schedule application Centerville Science Class Space Centerville CIS Classroom Improvements Student Laptop Loan Application	eLearning Regional Centers Business & Public Services Student Affairs	Research Implementation Implementation Implementation
		Student Analis	implementation
ITMP-778 ITMP-781 ITMP-808 ITMP-813 ITMP-828 ITMP-848 ITMP-849 ITMP-862 ITMP-892 ITMP-899	Electric Vehicle Lab Space Multi-Use VR Space Virtual Reality Treadmill One Button Recording Studio R&R Multimedia Class/Mtg Room Upgrade Eaglesoft Dental Software RT-PCR System Installation Smartboard Selection and Installation GM Training Program Multimedia MeasureLink Software and Equipment CS and IT Classroom Improvements	Science, Math & Engineering Regional Centers eLearning Library Information Technology Life & Health Sciences Science, Math & Engineering Science, Math & Engineering Workforce Dev & Corp Svc Science, Math & Engineering Business & Public Services	Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Implementation Research
ITMP-831	MENT OF DIGITAL PROCESSES Payroll Verification Reports	Accounting Services	Research
ITMP-833 ITMP-834 ITMP-837 ITMP-853 ITMP-867 ITMP-869 ITMP-895 ITMP-900 ITMP-907	Bursar Document Imaging Deregistration Process Update Multiple Payment Voucher Process Unimarket Invoicing Faculty Performance Evaluation Automate Employment Processes Refactor Budget Transfer App Concur Budget Hierarchy Blackbaud Raiser's Edge Reporting	Accounting Services Accounting Services Accounting Services Accounting Services Human Resources Human Resources Budget & Analysis Accounting Services Advancement/Grants Dev	Implementation Research Research Implementation Implementation Implementation Implementation Implementation Research
IMPROVE	MENTS FOR EMPLOYEES		
ITMP-771 ITMP-772 ITMP-798 ITMP-824 ITMP-866 ITMP-868 ITMP-876 ITMP-905 ITMP-910	CTL Registration Improvements Refresh the CTL Website Telephony Next Generation Cloud Departmental Shares Secure Data Sharing Staff Performance Evaluation Ellucian Colleague HR Beta IT Organization Structure Facilities Management Workflows	Ctr for Teaching & Learning Ctr for Teaching & Learning Information Technology Information Technology Human Resources Human Resources Accounting Services Information Technology Facilities Management	Research Implementation Research Implementation Implementation Implementation Research Implementation Research

INCREASI	E COMPETENCY BASED EDUCATION	V	
ITMP-801	Prior Learning Assessment	eLearning	Implementation
ITMP-909	Prior Learning History	eLearning	Research
INCREASI	THE COLLEGE COMPLETION RATE	:	
ITMP-874	Online Counseling Services	Student Affairs	Implementation
ITMP-888	my.Sinclair Al Recommender System	Information Technology	Research
ITMP-894	MFEC Student Auto-Enrollment	Student Affairs	Research
	E THE COLLEGE GOING RATE	Stadent / mans	researen
ITMP-860	FAFSA Simplifiction Act	Financial Aid & Scholarships	Implementation
ITMP-860	Financial Aid Award Letter	•	•
ITMP-878	my.Sinclair Student Portlet Design	Financial Aid & Scholarships Enrollment Operations	Implementation Research
ITMP-879	Scholarship System RFP	Enrollment Operations Financial Aid & Scholarships	Research
ITMP-902	Redesign of www.sinclair.edu	Marketing	Implementation
		Marketing	implementation
ITMP-856	FED STUDENT SERVICES Student Appointment Scheduling	School Partnerships	Research
			Research
	I / SUSTAIN TECHNOLOGY INVEST		Total Control
ITMP-785	R&R - Windows Desktop Replacement		Implementation
ITMP-786	R&R - Workstation Computers	Information Technology	Implementation
ITMP-787	R&R - PC Monitors	Information Technology	Implementation
ITMP-788	R&R - Mac Laptops	Information Technology	Implementation
ITMP-789	R&R - Macs - Desktops	Information Technology	Implementation
ITMP-790	R&R - Windows Laptops w/ Dock	Information Technology	Implementation
ITMP-791	R&R - Plotters	Information Technology	Implementation
ITMP-792	R&R - Printers	Information Technology	Implementation
ITMP-793	R&R - Satellite Copiers	Information Technology	Implementation
ITMP-794	R&R - Network Servers	Information Technology	Implementation
ITMP-795	R&R - Closet UPS's	Information Technology	Implementation
ITMP-797	R&R Wireless Network	Information Technology	Implementation
ITMP-802	Data Warehousing Tools Improvements	Information Technology	Implementation
ITMP-803 ITMP-806	WWW Search Engine Indexing	Information Technology	Research
ITMP-806	Overlapping Term Years R&R Wireless Microphones	Reg and Student Records Information Technology	Research
ITMP-814	Centerville Paging/Intercom System	Regional Centers	Implementation Implementation
ITMP-820	Upgrade to Windows 11	Information Technology	Implementation
ITMP-839	R&R - Data Center Power Protection	Information Technology	Implementation
ITMP-841	Job Scheduling Improvements	Information Technology	Implementation
ITMP-843	Upgrade Video Capture System	Life & Health Sciences	Implementation
ITMP-850	Cash Register Replacement	Business Services	Implementation
ITMP-852	Colleague POS Integration	Business Services	Research
ITMP-861	Colleague Management/Communication	Information Technology	Research
ITMP-863	Research EDR/MDR Replacement	Information Technology	Research
ITMP-877	Student Ability to Benefit Calculation	Financial Aid & Scholarships	Research
ITMP-886	Colleague Self-Service Refactor	Information Technology	Implementation
ITMP-889	R&R Network Infrastructure	Information Technology	Implementation
ITMP-890	R&R Phone Infrastructure	Information Technology	Implementation
ITMP-896	Implement UI6 for Colleague	Information Technology	Implementation
ITMP-903	Cloud Test/Dev Server Migration	Information Technology	Implementation
ITMP-904	Cloud Hosting Evaluation	Information Technology	Research
ITMP-906	Classroom R&R Optimization	Information Technology	Research
	S TRANSITION FOR LONG-TERM SU		
ITMP-881	Colleague Transfer Equivalency	Reg and Student Records	Research
ITMP-893	LER/Microcredential Infrastructure	eLearning	Research
000	, . nor our cachtair infrastractare	2_23.13	

RENEWAL/REPLACEMENT BUDGET

Summary



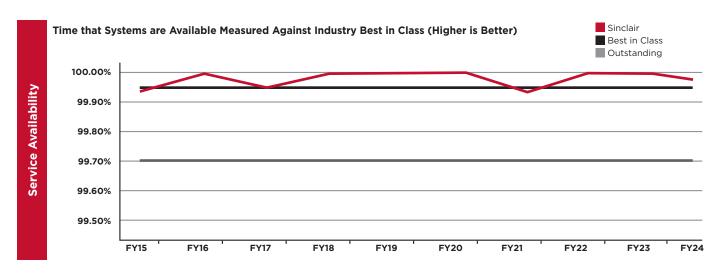
Detailed

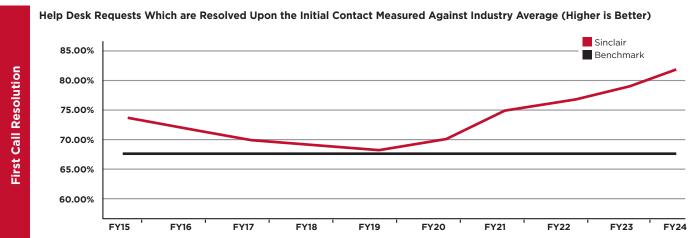
Item	Total Investment	Annual Funding	FY25 Expenditure	FY26 Expenditure	FY27 Expenditure	FY28 Expenditure	FY29 Expenditure
Windows desktop replacement	\$3,242,525	\$540,421	\$202,920	\$540,421	\$540,421	\$540,421	\$540,421
Workstation computers	\$1,057,500	\$176,250	\$65,000	\$25,000	\$152,500	\$52,500	\$176,250
PC Monitors	\$1,339,600	\$133,960	\$44,265	\$200,448	\$19,700	\$102,716	\$133,960
Macs - laptops	\$306,000	\$51,000	\$57,800	\$51,000	\$51,000	\$51,000	\$51,000
Macs - desktops	\$929,600	\$154,933	\$240,800	\$154,933	\$188,920	\$154,933	\$154,933
Windows laptops w/dock	\$2,261,000	\$452,200	\$68,200	\$452,200	\$452,200	\$452,200	\$452,200
Plotters	\$40,000	\$5,714	\$4,000	\$5,714	\$5,714	\$5,714	\$5,714
Printers	\$278,400	\$39,771	\$24,000	\$39,771	\$32,429	\$38,914	\$39,771
Satellite copiers	\$1,034,000	\$147,714	\$44,000	\$147,714	\$143,000	\$143,000	\$147,714
Network Servers	\$1,849,000	\$369,800	\$21,500	\$369,800	\$339,800	\$369,800	\$369,800
Closet UPS's	\$244,800	\$48,960	\$48,960	\$48,960	\$48,960	\$48,960	\$48,960
Network Infrastructure	\$3,700,000	\$528,571	\$90,000	\$100,000	\$100,000	\$300,000	\$100,000
Wireless Network Infrastructure	\$585,000	\$117,000	\$191,500	\$100,000	\$183,000	\$100,000	\$100,000
UNIX Servers	\$261,000	\$52,200	\$0	\$0	\$261,000	\$0	\$0
Hyper-converged systems	\$340,000	\$68,000	\$0	\$0	\$0	\$0	\$0
Video Capture Cameras	\$79,200	\$15,840	\$15,600	\$15,840	\$15,840	\$15,840	\$15,840
Backup infrastructure	\$510,000	\$102,000	\$0	\$410,000	\$0	\$0	\$0
Phone infrastructure	\$1,020,000	\$145,714	\$90,000	\$145,000	\$145,000	\$145,000	\$145,000
Load Balancers	\$300,000	\$50,000	\$0	\$0	\$0	\$0	\$0
Library System	\$35,000	\$7,000	\$0	\$0	\$35,000		\$0
Firewall	\$250,000	\$50,000	\$0	\$0	\$10,000	\$250,000	\$0
Multimedia classroom/mtg room	\$4,062,000	\$338,500	\$270,000	\$300,000	\$300,000	\$300,000	\$300,000
Bldg 14 forum	\$375,000	\$41,667	\$0	\$0	\$375,000	\$0	\$0
Bldg 8 stage multimedia	\$125,000	\$15,625	\$0	\$0	\$125,000	\$0	\$0
Great Hall multimedia	\$63,000	\$6,300	\$0	\$0	\$0	\$0	\$0
Phone UPS	\$40,000	\$40,000	\$0	\$0	\$0	\$50,000	\$0
Cable TV System	\$250,000	\$25,000	\$0	\$0	\$100,000	\$0	\$0
Wireless Microphone System	\$100,000	\$11,111	\$12,000	\$10,000	\$10,000	\$10,000	\$15,000
Charity Earley multimedia	\$126,000	\$12,600	\$0	\$0	\$126,000	\$0	\$0
Televisions and Monitors	\$150,000	\$21,429	\$15,000	\$15,000	\$15,000	\$25,000	\$25,000
Total	\$24,953,625	\$3,769,281	\$1,505,545	\$3,131,802	\$3,775,484	\$3,155,998	\$2,821,563

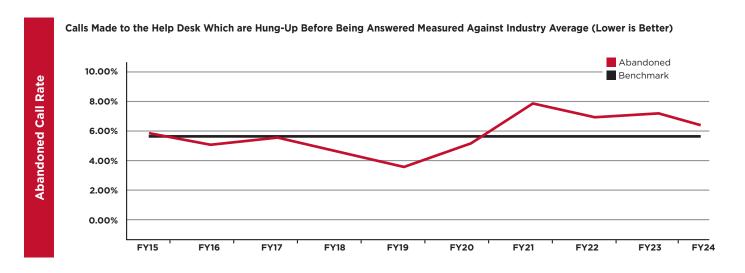
APPENDIX 1: SINCLAIR IT

Key Performance Measures Against Industry Benchmarks

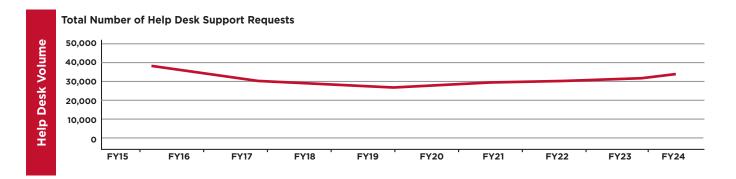
Industry benchmark data provided by Gartner, the world's leading IT research and advisory company.

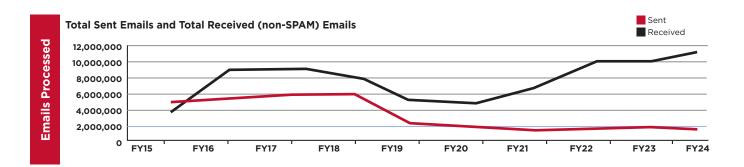


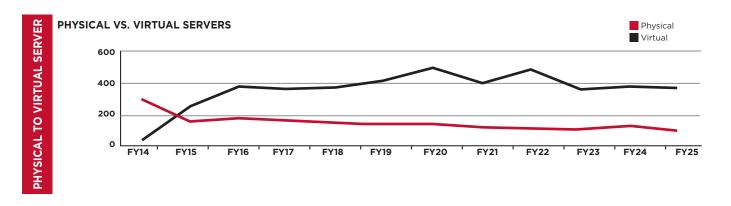


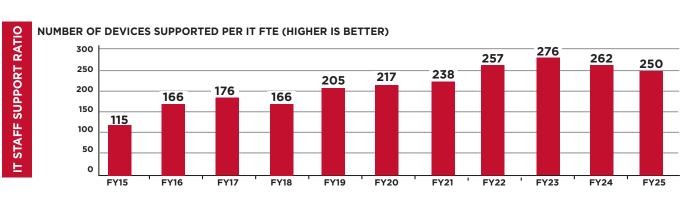


Additional Service/System Usage Charts









IT CHARTER

VISION

To be recognized as a trusted partner and catalyst for business innovation through effective technology leadership.

MISSION

The IT department is dedicated to providing students, faculty, staff, and stakeholders with the tools and services needed to enable efficient workflows, cooperation, and communication, supporting the achievement of organizational objectives.

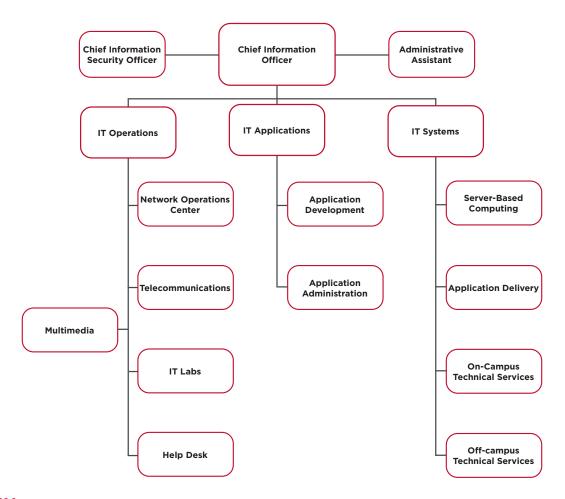
GUIDING PRINCIPLES

- Enterprise Value Our goal is to deliver substantial long-term value to the college by providing solutions that are fit for purpose and that reduce operational complexity and cost of ownership.
- **Customer-Centric** We provide solutions that empower students, faculty, staff, and stakeholders with the resources they need to learn and work from anywhere.
- **Integration First** We evaluate, select, and integrate the best commercially available solutions to meet the needs of the college. We only consider custom solutions as a last resort.
- **Information Management** We provide secure and timely access to college data assets through well managed systems integration and access control procedures.
- Innovative We seek new and creative ways to utilize technology to advance college priorities.
- **Secure** We protect enterprise assets by building and maintaining a stable and secure technology environment that reflects the college's appetite for risk.
- **Collaborative** We support teamwork that is fostered through mutual communication, collaboration, and a culture of respect across the organization.
- **Compliant** We operate within the applicable regulatory and legal mandates.

HIGH-LEVEL RESPONSIBILITIES

- **Cybersecurity** Ensuring strong systems security, data integrity, and privacy through proactive monitoring, continually improving systems protections, user awareness training, and incident response procedures.
- Systems and Support Providing reliable, well-managed systems, and exceptional support.
- **Application Integration and Development** Integrating, customizing, and maintaining applications that streamline college functions.
- **Solutions Advisory** Helping departments evaluate, select, and implement solutions that address their needs and drive digital transformation.
- Project and Change Management Managing technology projects and initiatives to success.
- Governance Defining campus-wide technology standards and acceptable use policies.
- Procurement and Fiscal Management Cost effective procurement of technology and overall budget management.

ORGANIZATION STRUCTURE



STRATEGY

STRATEGIC IT PRIORITIES

Our approach for the upcoming 3 to 5 years will be shaped by the following priorities, as per the IT Environmental Scan detailed in this document. Recognizing the importance of these pivotal areas for change and transformation, we have incorporated them into our strategy to keep the college at the cutting-edge of technological progress.

- Enhancing cybersecurity In light of increasing cybersecurity threats, the College's defenses will be strengthened. We plan to proactively improve prevention and monitoring measures to effectively handle new threats. Building a culture of cyber awareness within our staff and establishing solid incident response plans are key components of this priority. Our goal is to protect our systems, data, and confidential information by ensuring a secure digital environment.
- Advancing cloud-centric architecture As the industry continues to shift to cloud-based solutions, our focus is moving to a cloud-centric framework. This includes effective management of an expanding set of systems, meeting integration needs, and applying rigorous governance. Adopting cloud technologies will allow us to improve scalability, adaptability, and overall system performance.
- Refining classroom and facilities We intend to propose modifications to optimize the number of physical classrooms and adapt the combination of spaces to the changing needs of in-person, virtual, and blended models of learning. The goal is to design smart, interactive environments that enhance the learning experience and increase operational productivity while keeping costs in check.

- **Investigating and employing AI** Our objective is to leverage the potential of AI for sustainable development. By incorporating AI into various segments of the organization, we anticipate boosting efficiency, fostering innovation, and lowering expenses. Additionally, we understand the necessity to address the cybersecurity and privacy concerns linked with AI technology use thoughtfully.
- **Restructuring IT** We will move away from the current org structure, which predates the advent of cloud computing, AI, and the surge in cybersecurity challenges. A transition to a new structure, designed to meet the present and future requirements of the college, is planned. This will highlight the significance of comprehensive technology governance, integration, and change management.

ENVIRONMENTAL SCAN OF TECHNOLOGY

Note the following key areas of technological change that we believe will impact the college over the next 2-3 years.

- The exponential growth in cyber-attacks is increasing the time and cost required to stay secure.
 - o There is a need for stronger prevention and monitoring capabilities.
 - o This is elevating the importance of having a cyber-aware workforce.
 - o It is increasing the need for continually improving incident response procedures.
- The adoption of cloud-based solutions is increasing the demand for integration.
 - o Departments are unlocking new capabilities/efficiencies through the rapid adoption of cloud-based solutions.
 - o Many of these solutions are expanding the capabilities of existing systems, like Colleague. Accordingly, the rate of adoption is increasing licensing costs to the college.
 - o While this shift is decreasing the need for traditional software development projects, it is dramatically increasing the need to integrate and support these solutions to ensure they work well within Sinclair.
- AI innovations are introducing tremendous opportunities and tremendous risks.
 - o Artificial intelligence is evolving at a faster pace than any technology in history.
 - o While AI is driving innovations in teaching, learning, and digital transformation, it is also exposing threats to privacy, inclusion, and cybersecurity. As such, the need for AI governance and a comprehensive data management strategy is paramount.
- There is a growing burden of supporting legacy technology.
 - o The hardware and licensing costs of legacy technologies is increasing.
 - o Budget constraints have forced the college to extend the use of some systems beyond its planned life, which has increased the time required to support such systems.
 - o The adoption of cloud-based systems can outpace the decommissioning of legacy systems they are replacing.
- The responsibilities of the IT department are evolving.
 - o AI and cloud growth are driving the need for governance models and knowledge management solutions.
 - o Tightening budgets and staff reductions have limited the ability to assist with business application support.
 - o The importance of project and change management expertise has never been higher.
- Other emerging technology factors.
 - o Converging physical networks (uniting data, AV, building controls, etc.).
 - o Growth of virtual and augmented reality.
 - o Commercialization of 3d printing.
 - o Expansion of blockchain.
 - o Emergence of quantum computing.

