

2020-2021 IT Master Plan

Executive Summary

SINCLAIR COLLEGE | AUGUST 31, 2020



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Introduction



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I am pleased to present this latest version of the Information Technology department annual master plan for Fiscal Year 2021. The following pages will provide information, not only on the projects that the department will undertake in the next year but also provide a status report of this past year's projects. In addition, the report will provide information about the operational tasks that are performed by IT department staff in order to maintain the complicated infrastructure used every day by tens of thousands of faculty, staff, and active and prospective students.

This document is the culmination of a yearlong process that makes use of quarterly meetings with all major departments to identify their needs for support from the IT department. This process ensures that the work of the Information Technology department is in line with the priorities of the college and that there is a shared vision of what those priorities are and how they link to the college's mission.

For the 2021 Fiscal Year we have identified 127 projects through this process. A full list of all projects can be viewed, starting on page 4, categorized by the strategic initiative that each project supports. In other sections of the report we also provide information on the number of projects from each division as well as the distribution of projects related to the college's core strategies, IT functions, etc.

I hope the information this document provides will be useful in helping you to understand the work that we do in Information Technology and shed light into areas that are not always visible. If there is anything you would like additional information on, or suggestions you would like to make, feel free to contact me.

Plan Summary

Current Year Goals and Priorities



Goals and Measures

Measure	Goal
Systems Availability	99.97% <i>Higher is Better</i>
% of Help Desk Calls Resolved at Time of Call	70% <i>Higher is Better</i>
% of Help Desk Calls Abandoned by Caller	5% <i>Lower is Better</i>
Completion of Master Plan Projects	100% <i>Higher is Better</i>

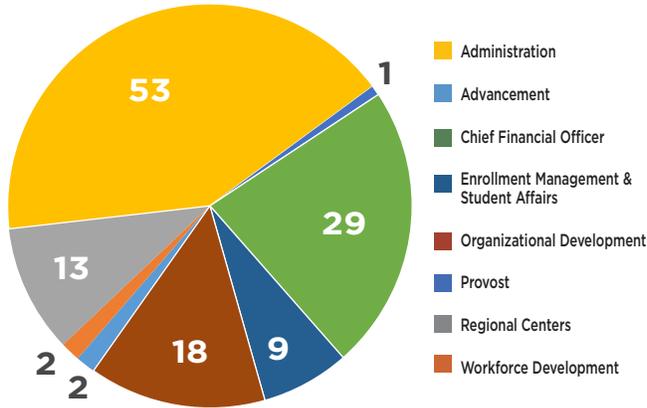
Prior Year Highlights

Projects
130 Master Plan Projects Completed
26 Master Plan Projects to be Completed by EOY
2 Master Plan Projects Canceled
14 Additional Projects Completed

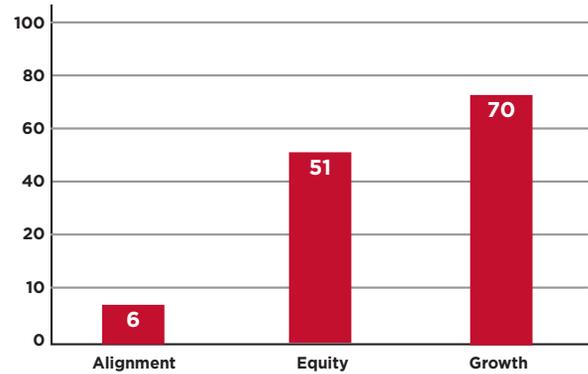
Operations
99.99% Systems Availability
67.24% Help Desk Calls Resolved at Time of Call
3.52% Help Desk Calls Abandoned by Caller
25,495 Number of Help Desk Requests for Service

Project Highlights for 2020-2021

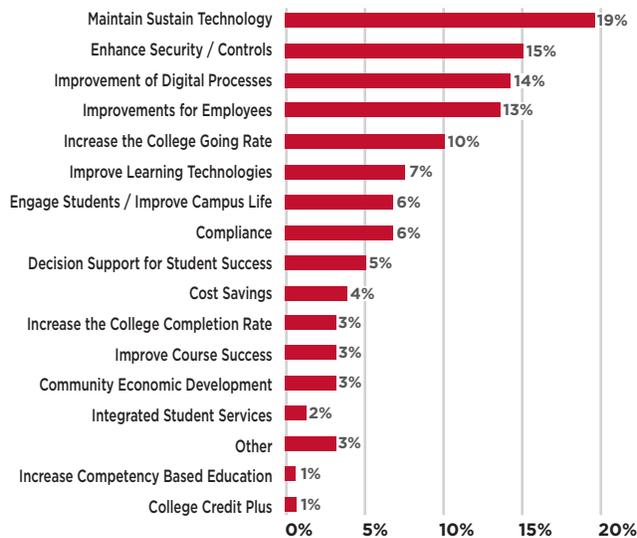
Projects by College Department



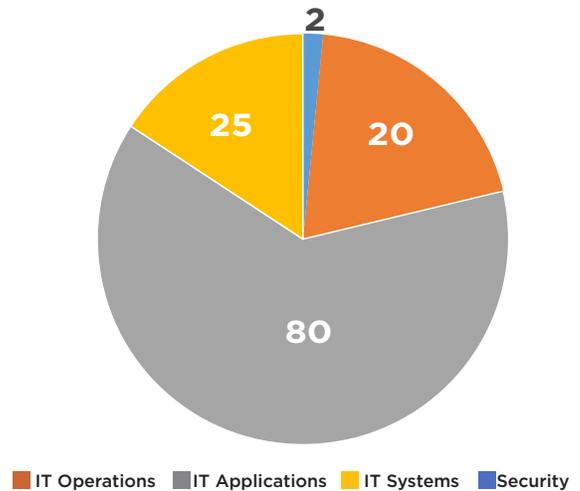
College Strategies



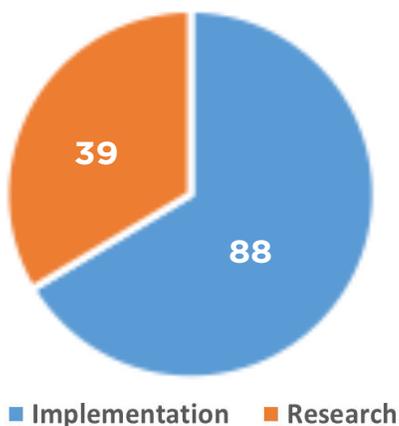
College Strategic Initiative



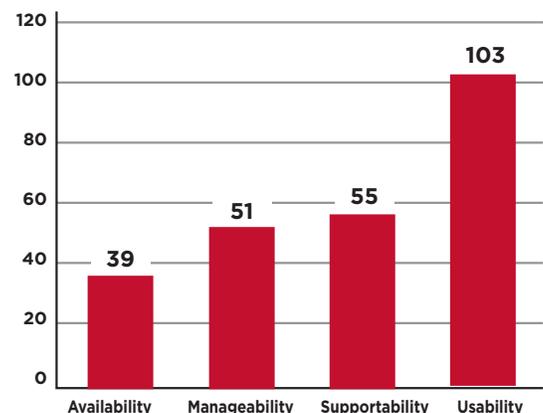
Projects by IT Function



Projects by Type



Projects by IT Purpose



APPENDIX 1

Full Project List for 2020-2021**COLLEGE CREDIT PLUS**

21-43	CCP Billing	Implementation	Accounting Services
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COMMUNITY ECONOMIC DEVELOPMENT

21-25	Workforce Development Healthcare Site	Implementation	Workforce Dev & Corp Svc
21-94	HOPE Center	Implementation	Facilities Management
21-108	Purchasing Spend Analysis System	Research	Business Services
21-150	Dayton Arcade	Implementation	Facilities Management

COMPLIANCE

21-42	Tartan Card Balances	Implementation	Accounting Services
21-88	Populate E-911 Location Data	Implementation	Information Technology
21-90	Academic Integrity Process	Implementation	Student Affairs
21-91	Tax Reversal Automation for Bookstore	Implementation	Business Services
21-104	Office 365, OneDrive Backup Solutions	Research	Information Technology
21-115	Ability to Benefit - Phase II	Research	Financial Aid

COST SAVINGS

21-1	IPv4 Sale/Lease Research	Research	Information Technology
21-95	DocuSign Expansion	Research	Business Services
21-103	IT Operations Management Software	Research	Information Technology
21-131	Migration of Network Storage	Implementation	Information Technology
21-147	Mura CMS Migration	Research	Information Technology
20-153	Expense Transfer App	Research	Accounting Services

DECISION SUPPORT FOR STUDENT SUCCESS

21-63	Maxient Integration with Colleague	Implementation	Student Affairs
21-64	OneView Phase II	Implementation	Student Affairs
21-80	Student Life Cycles and Personas for CRM	Implementation	Student Affairs
21-141	Refine MAP Logic	Implementation	Academic Advising
21-142	Student Success Plan Improvements	Implementation	Academic Advising

DIGITALIZATION OF ANALOG PROCESSES

21-16	I-9/E-Verify Integration	Implementation	Human Resources
21-21	Ellucian Position Management and Control	Research	Human Resources
21-22	Ellucian Projects Accounting	Implementation	Grants Development/Advancement
21-32	Integrate Schedule Source with Colleague	Research	Public Safety
21-37	Concur Invoice/Check request	Research	Accounting Services
21-38	Concur Travel and Expense Automation	Research	Accounting Services
21-41	Document Imaging - Payroll	Research	Accounting Services

DIGITALIZATION OF ANALOG PROCESSES (CONT.)

21-44	Document Imaging - Accounting	Research	Accounting Services
21-66	CTAG Credit Capture	Implementation	School & Community Partnerships
21-69	Purchasing Contract Workflow	Research	Business Services
21-87	Benefits Enrollment Transfer - Phase II	Implementation	Human Resources
21-111	Colleague/E-Builder Budget Integration	Research	Facilities Management
21-113	Electronic Submission for New Employees	Implementation	Human Resources
21-153	Document Imaging – Bursar	Implementation	Accounting Services

ENGAGE STUDENTS / IMPROVE CAMPUS LIFE

21-18	Outlook Web Single-Signon	Implementation	Information Technology
21-31	Migrate Clarion Site to Mura	Implementation	Student Enrichment Programs
21-50	Campus Wi-Fi Expansion	Implementation	Information Technology
21-78	SSO for TCS SmartSuite POS	Implementation	Business Services
21-98	Welcome Center Collaboration Spaces	Implementation	Enrollment Mgmt/Registration
21-107	Parking Space Count System	Research	Business Services

ENHANCE SECURITY / CONTROLS

21-39	PNC Paycard Integration	Research	Accounting Services
21-71	Removal of SSN from Inactive Accounts	Implementation	Information Technology
21-72	User Account Provisioning	Implementation	Information Technology
21-73	User Account Single Sign-On	Implementation	Information Technology
21-74	User Account Multi-Factor Authentication	Implementation	Information Technology
21-75	User Account Password Reset	Implementation	Information Technology
21-77	eLearn Change Management	Implementation	eLearning
21-93	Utility Network Isolation	Research	Information Technology
21-101	Advanced Web Application Firewall	Implementation	Information Technology
21-102	Improve Server Config Management	Implementation	Information Technology
21-105	IT Operations System Improvements	Implementation	Information Technology
21-110	VPN for International Students	Research	Information Technology
21-126	Create DevOps Production Environment	Implementation	Information Technology
21-135	Implement Anti-Spoofing Procedures	Implementation	Information Technology
21-144	Isolated Payment Card Data Environment	Implementation	Information Technology

IMPROVE COURSE SUCCESS

21-12	Clinical/Labs Scheduling Tool	Implementation	Life & Health Sciences
21-19	Improve eLearn Data Updating	Implementation	Information Technology
21-60	Tracking and Scheduling for Tutoring	Implementation	Student Affairs

IMPROVE LEARNING TECHNOLOGIES

21-30	Monitoring of Computer Usage	Research	Information Technology
21-92	R&R - Apple Desktops	Implementation	Information Technology
21-97	Eaker Street Classrooms	Implementation	Science, Math & Engineering
21-112	Virtual Event Management	Research	Information Technology
21-127	Advanced Manufacturing in Mason	Implementation	Courseview Campus Center
21-129	Replace Vantage Digital Panoramic System	Implementation	Life & Health Sciences

IMPROVEMENT OF DIGITAL PROCESSES

21-6	Grants Management Database	Implementation	Grants Development/Advancement
21-17	Microsoft Flow/Forms	Implementation	Information Technology
21-40	Fifth-Third Expert AP	Research	Accounting Services
21-46	Enhance Secure File Upload Interface	Research	Accounting Services
21-48	Automate Financial Statements	Research	Accounting Services
21-49	Automate Balance Sheet	Research	Accounting Services
21-54	Recode Math Placement Rule	Implementation	Information Technology
21-56	Enhance Campus Directory	Research	Human Resources
21-57	Application Performance Monitoring	Implementation	Enrollment Mgmt/Registration
21-65	CCP Faculty Onboarding Tool - Phase II	Implementation	School & Community Partnerships
21-79	CampusLogic Scholarship Universe	Research	Financial Aid
21-89	Bookstore Real-time Processing	Implementation	Business Services
21-106	RFID Inventory Improvement	Research	Business Services
21-114	Automate Journal Entry - Phase II	Implementation	Accounting Services
21-155	Foundation Accounting Reporting	Research	Accounting Services

IMPROVEMENTS FOR EMPLOYEES

21-8	Expense Transfer	Implementation	Accounting Services
21-9	Automate Capital Budget Review Process	Implementation	Accounting Services
21-11	Automate Salary Administration Process	Research	Budget & Analysis
21-20	Migration of H: drives to OneDrive	Implementation	Information Technology
21-47	Improve Check Request Process	Research	Accounting Services
21-58	eSyllabus Refactor	Implementation	Associate/Assistant Provosts
21-70	Grant Hours Certification	Implementation	Accounting Services
21-82	Enhance Leave Request Process	Implementation	Human Resources
21-86	Colleague Online Purchase Requisition	Implementation	Accounting Services
21-146	Enhance Work-From-Home Capabilities	Implementation	Information Technology
21-160	eLearn Demo Student Account	Research	ELearning

INCREASE COMPETENCY BASED EDUCATION

21-134	Internship Management System - Phase III	Implementation	Work-Based Learning
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INCREASE THE COLLEGE COMPLETION RATE

21-7	Veteran's Coins Enhancements	Implementation	Military Family Education
21-24	Ellucian Student Planning	Research	Academic Advising
21-33	Revise Advising Portlet	Implementation	Academic Advising

INCREASE THE COLLEGE GOING RATE

21-5	Military Transfer Credit	Implementation	Military Family Education
21-10	High School Admin Portal - Phase III	Implementation	Tech Prep
21-13	WWW Migration to Mura 7.1	Implementation	Marketing
21-55	Campus Management Nexus CRM	Implementation	Enrollment Mgmt/Registration
21-68	Message Control Center - Phase III	Implementation	Information Technology
21-116	Title IV Credit Hours for CCP	Research	Financial Aid
21-133	Educational Talent Search Application	Implementation	Grants Development/Advancement
21-158	PTA Transcript Review Application	Implementation	Life & Health Sciences

INTEGRATED STUDENT SERVICES

21-59	AI Recommender System for Portal	Research	Information Technology
21-84	Use of D2L for Student Orientation	Research	Enrollment Management/Registration
21-154	Streamline FA Document Processing	Implementation	Enrollment Management/Registration

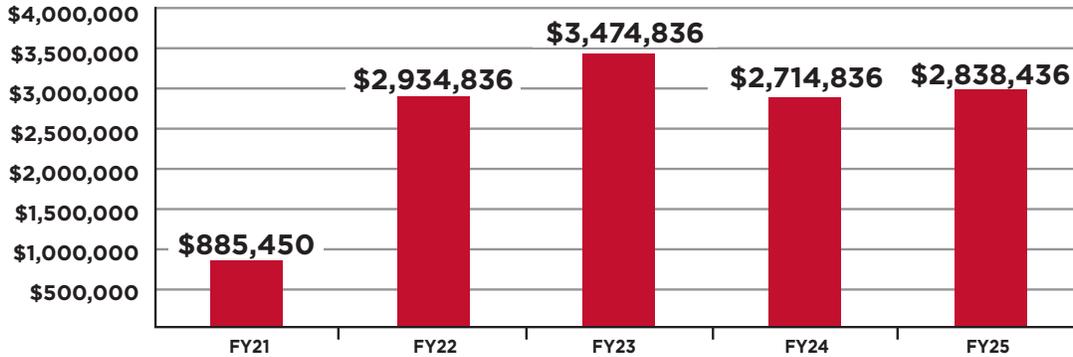
MAINTAIN / SUSTAIN TECHNOLOGY INVESTMENT

21-51	Automation Controls Replacement	Implementation	Facilities Management
21-52	Clock Management System Replacement	Implementation	Facilities Management
21-53	Centerville Auditorium Upgrades	Research	Facilities Management
21-76	Testing of Colleague on RedHat Linux	Implementation	Information Technology
21-81	Colleague Self-Service Secure Upload	Research	Financial Aid
21-83	IDWorks Carding Stations	Implementation	Enrollment Mgmt/Registration
21-96	Replace 65" Monitors In Great Hall	Implementation	Conference Center
21-109	Replace Irrigation Hardware	Implementation	Facilities Management
21-118	R&R - Desktop PC's	Implementation	Information Technology
21-119	R&R - Computer Monitors	Implementation	Information Technology
21-120	R&R - Windows Laptops	Implementation	Information Technology
21-121	R&R - Printers	Implementation	Information Technology
21-122	R&R - Copiers	Implementation	Information Technology
21-123	R&R - UPS Units	Implementation	Information Technology
21-124	R&R - Servers	Implementation	Information Technology
21-125	R&R - SQL Cluster	Implementation	Information Technology
21-128	Automation Controls Replacement	Implementation	Information Technology
21-136	Access Control Infrastructure	Research	Facilities Management
21-143	Disaster Recovery Infrastructure	Implementation	Information Technology

UNMANNED AERIAL SYSTEMS

21-29	UAS Website Redesign	Implementation	UAS
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APPENDIX 2

Renewal & Replacement Budget (FY21-FY25)**Summary****Detailed**

Item	Total Investment	Annual Funding	FY21 Expenditure	FY22 Expenditure	FY23 Expenditure	FY24 Expenditure	FY25 Expenditure
Windows desktop replacement	\$3,361,640	\$560,273	\$400,000	\$560,273	\$560,273	\$560,273	\$560,273
Workstation computers	\$273,600	\$45,600	\$0	\$0	\$0	\$0	\$63,600
PC Monitors	\$937,296	\$93,730	\$30,000	\$93,730	\$93,730	\$93,730	\$93,730
Macs - laptops	\$223,600	\$37,267	\$0	\$37,267	\$37,267	\$37,267	\$37,267
Macs - desktops	\$852,000	\$142,000	\$145,000	\$142,000	\$142,000	\$142,000	\$142,000
Windows laptops	\$914,600	\$182,920	\$116,450	\$182,920	\$182,920	\$182,920	\$182,920
Plotters	\$60,000	\$8,571	\$0	\$8,571	\$8,571	\$8,571	\$8,571
Printers	\$425,000	\$60,714	\$10,000	\$60,714	\$60,714	\$60,714	\$60,714
Satellite copiers	\$979,000	\$139,857	\$15,000	\$139,857	\$139,857	\$139,857	\$139,857
Network Servers	\$1,650,000	\$330,000	\$50,000	\$330,000	\$330,000	\$330,000	\$330,000
Closet UPS's	\$244,800	\$48,960	\$9,000	\$49,504	\$49,504	\$49,504	\$49,504
Network Infrastructure	\$3,700,000	\$528,571	\$0	\$600,000	\$600,000	\$300,000	\$700,000
Wireless Network Infrastructure	\$447,235	\$89,447	\$0	\$125,000	\$0	\$0	\$0
UNIX Servers	\$261,000	\$52,200	\$0	\$0	\$500,000	\$0	\$0
Storage	\$600,000	\$120,000	\$0	\$0	\$0	\$0	\$0
Hyper-converged systems	\$340,000	\$68,000	\$0	\$0	\$0	\$340,000	\$0
Backup infrastructure	\$510,000	\$102,000	\$0	\$0	\$0	\$0	\$0
Phone switch	\$1,020,000	\$145,714	\$0	\$145,000	\$145,000	\$145,000	\$145,000
Load Balancers	\$300,000	\$50,000	\$0	\$0	\$300,000	\$0	\$0
Library System	\$35,000	\$7,000	\$0	\$35,000	\$0	\$0	\$0
Firewall	\$207,500	\$41,500	\$0	\$100,000	\$0	\$0	\$0
Multimedia classroom/mtg room	\$3,600,000	\$300,000	\$100,000	\$300,000	\$300,000	\$300,000	\$300,000
Bldg 14 forum	\$375,000	\$41,667	\$0	\$0	\$0	\$0	\$0
Bldg 8 stage multimedia	\$125,000	\$15,625	\$0	\$0	\$0	\$0	\$0
Cable TV System	\$250,000	\$25,000	\$0	\$0	\$0	\$0	\$0
Wireless Microphone System	\$100,000	\$11,111	\$0	\$10,000	\$10,000	\$10,000	\$10,000
Charity Earley multimedia	\$126,000	\$12,600	\$0	\$0	\$0	\$0	\$0
Televisions and Monitors	\$150,000	\$21,429	\$10,000	\$15,000	\$15,000	\$15,000	\$15,000
Total	\$22,068,271	\$3,281,757	\$885,450	\$2,934,836	\$3,474,836	\$2,714,836	\$2,838,436

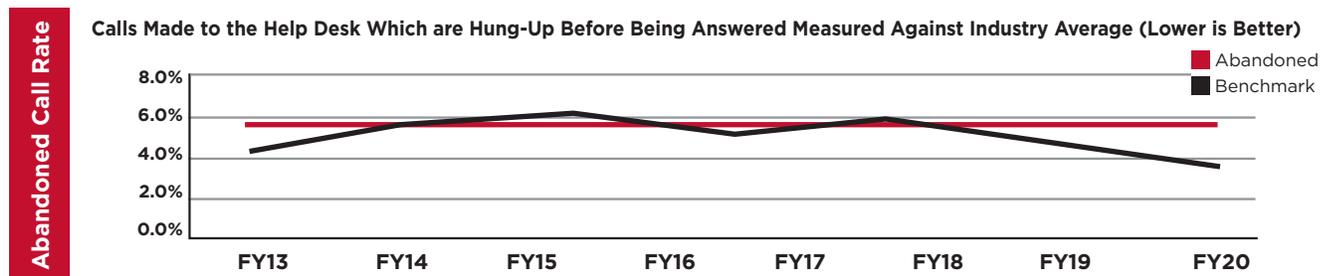
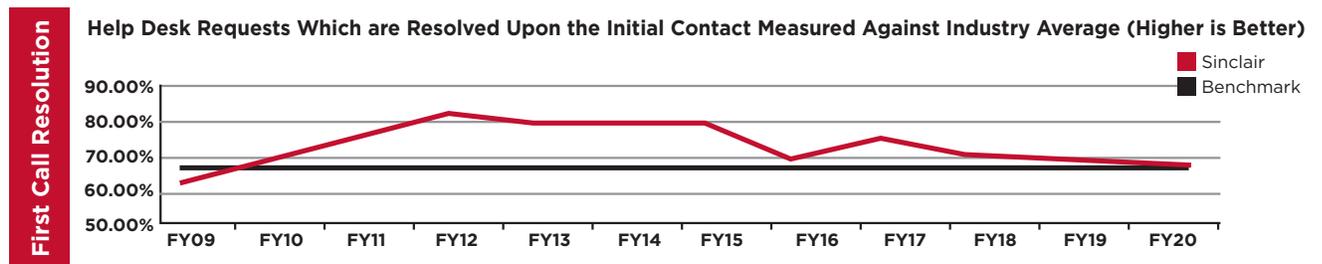
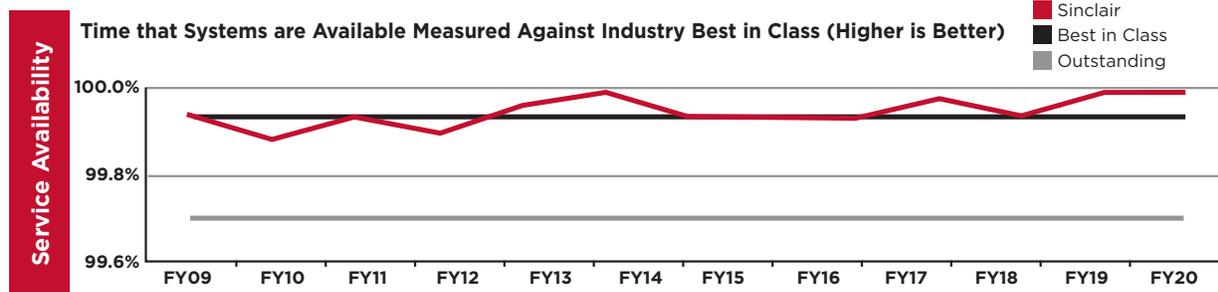
APPENDIX 3

Operational Highlights

<p>Students/Staff Served</p> <p>Students 30,007 Enrolled in FY20 93,520 Email Accounts</p> <p>Locations/Classrooms 5 Locations 420 Multimedia Classrooms 200 Computer Classrooms 18 Remote Locations/19 Classrooms</p> <p>Staff 1,462 FTEs 3,481 Accounts</p>	<p>Technologies Managed</p> <p>Servers & Storage 492 Servers 323 Terabytes of Storage</p> <p>Desktops & Applications 6,794 Desktops & Laptops 285 Applications/142 Virtual</p> <p>Network, Phones, Printers 17,373 Network Ports 2,369 Phones 1,050 MB of Internet Bandwidth 41 Million Web Page Views per Year</p>	<p>IT Staff Highlights</p> <p>55 Full-time Employees</p> <p>23 Part-Time Employees</p> <p>13 Student Employees</p> <p>73 Full-Time Equivalents</p>
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Key Performance Measures Against Industry Benchmarks

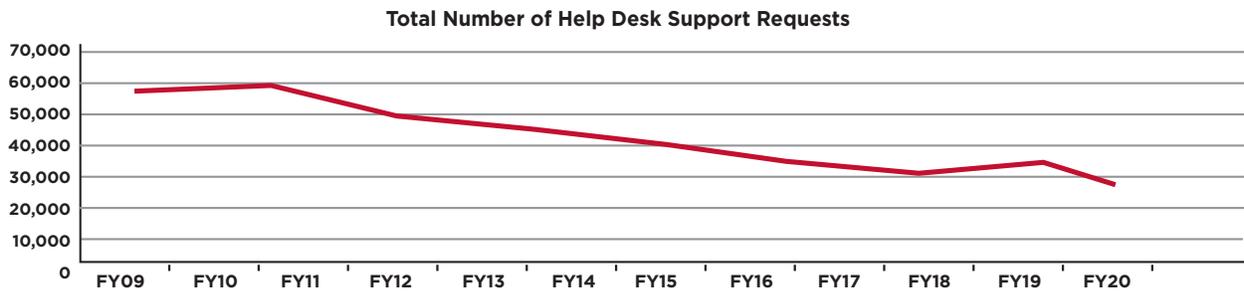
Industry benchmark data provided by *Gartner*, the world's leading IT research and advisory company.



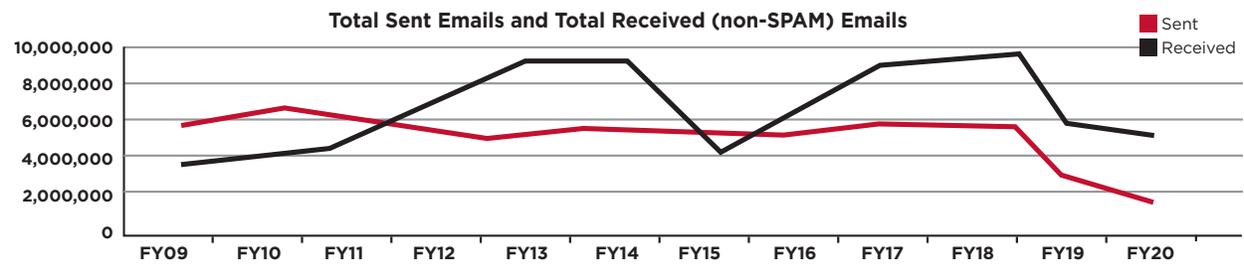
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Additional Service/System Usage Charts

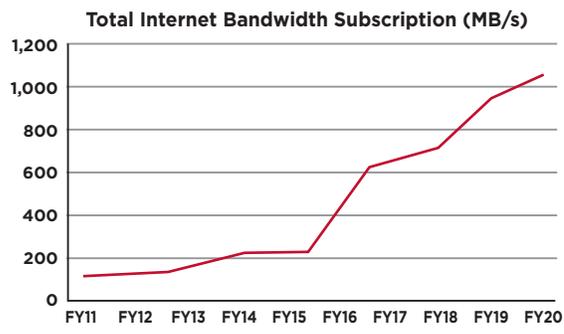
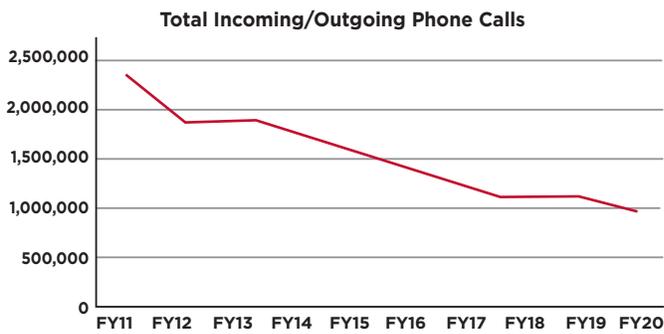
Help Desk Volume



Emails Processed



Voice/Data Transition



Mobile Growth

