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### **VP/CIO MESSAGE**

During Fiscal Year 2019 Information Technology Services made significant progress working with our partners throughout the university to advance the strategic objectives of our institution.

Working closely with faculty, students, staff, and administration and strengthening our partnerships through IT governance and communication groups, we delivered critical solutions in FY2019 to position ITS to support future growth and reduce risk: examples include the design and implementation of a Controlled Unclassified Information environment to support research, development of a new Security policy and standards using the NIST framework, external assessments of IT Security and Wireless Network, and the development of our Data Integration Service and the Data Governance program.

We delivered a redesigned ITS website to the Mason community with significantly improved navigation, content management and a new knowledge base, with the goal of simplifying access and transparency to ITS information and resources for our Mason partners and customers.

We thank our partners for their direction, support and assistance. I'd like to call out the groups who afforded us advice and guidance: the Information Technology Governance Group (ITGG), the Faculty Senate Technology Policy Committee (FSTPC), the Technology Leadership Council (TLC), and the System Administrator Leadership Team (SALT).

I would also like to thank the ITS Leadership Working Group (LWG-ITS' management/ leadership team) and for their direction in moving ITS towards its goal of "One ITS"-emphasizing collaboration and customer focus and to thank the many members of ITS for their contributions. I am honored to be part of this department of dedicated and talented IT professionals.

Enclosed are the highlights of ITS's accomplishments in FY2019.

Sincerely,

Marilyn T. Smith
Vice President and CIO

### WHO WE ARE & WHAT WE DO

Information Technology Services (ITS) is Mason's central IT organization. We provide IT resources, systems, services, and support to the university community. Six groups comprise ITS, and in FY2019, ITS employed more than 220 employees and 150 students.

#### **ALIGNED WITH OUR PRINCIPLES**

- Engage with our customers and partners to align resources
- Incorporate lifecycle planning to develop sustainable services
- Value our people by encouraging their professional growth, promoting their well-being, and recognizing excellence
- Ensure that information technology assets are protected and monitored to reduce university risk
- · Deliver solutions that catalyze student success
- Respond with agility to changing technology needs

#### **OUR GROUPS**

- Academic Strategies
- Enterprise Applications
- Enterprise Infrastructure Services
- Enterprise Service Delivery
- IT Security
- Learning Support Services

#### PROVIDING SERVICES AND SUPPORT TO MAKE MASON GREAT

- Application Integration
- Aguia Data Center
- Blackboard & Collaborate
- Business Intelligence & Databases
- Collaborative Technologies
- Communications & Project Management
- Computer & Software Resources
- Data Governance & Integration
- Email & Telecom
- Enterprise Applications

- GMU-TV
- Infrastructure & Network
- IT Security
- STAR Lab & CLUB
- Systems Integration
- Technology & Classroom Support
- Technology Enhanced Classrooms
- Videoconferencing & Telepresence
- Virtual Computing Lab
- Web Content Management



# PROJECTS THAT IMPROVE THE ACADEMIC, RESEARCH & ADMINISTRATIVE EXPERIENCES

- Designed and built 8 university classrooms,
   2 departmental classrooms, and a computer lab
   in the new Peterson Family Health Sciences Hall
   on the Fairfax Campus
- Designed and installed 13 classrooms in the Mason Global Center
- Refreshed classroom technology in 38
   University Registrar Classrooms across
   the Fairfax, Arlington, and SciTech Campuses
- Upgraded and installed technology in 7 College of Visual and Performing Arts departmental classrooms
- Participated in the Lifecycle CRM Program and Steering Committee to support the Student Experience Redesign (SER) Program and the Lifecycle Customer Relationship Management (CRM) projects
- Developed a single, user-friendly, clientoriented ITS website to house customerfacing ITS services, support, and information
- Instituted student photos in Blackboard to support the instructor and student relationship, while meeting security and privacy requirements
- Partnered with the Office of Admissions, Enrollment Management, and Academic Innovations and New Ventures to develop student data dashboards in support of the ADVANCE program
- Installed hardware and software to facilitate the rapid distribution of emergency messages

- Supported the replacement of Hobsons with TargetX/Salesforce, allowing graduate admissions units to manage the entire enrollment process with one tool
- Acquired and implemented a university-wide site license for Qualtrics, an online survey tool
- Partnered with the Vice President of Research to create a new virtual computing infrastructure to support research projects involving Controlled Unclassified Information (CUI) data
- Created the HB1 online consent form to ensure student privacy is protected and developed a method for hiding student email addresses in PeopleFinder and MasonLive
- Deployed Handshake, Mason's new career services management tool, for use by Career Services staff, Mason students, alumni, and employers
- Developed a custom web-based system for The School of Nursing BSN programs to manage applications and automate admissions processes
- Upgraded 65 switches in academic and administrative buildings and residence halls
- Collaborated with Old Dominion University and Virginia Community Colleges to launch the Online Virginia Network website
- Upgraded and virtualized telepresence infrastructure to allow Mason to continue to support 4-VA

# **& STUDENT RELATIONSHIP**WITH BLACKBOARD

ITS frequently received feedback from faculty for access to photos of their students as part of their class rosters. The request was driven by faculty wanting to put faces with names to improve communication and relationship building with their students and allow faculty to track attendance and enhance assessment integrity. Since instructors use Blackboard more regularly than other university applications, ITS, with support from the Deans of Student Academic Affairs, Retention, and Transitions and Volgenau School of Engineering, determined how to make photos available for this platform. In coordination with partners in the Mason Card Office, student photos are now securely transferred into Blackboard. Once inside Blackboard, the photos are only accessible to instructors (this does not include teaching assistants or other students enrolled in classes).



# ONLINE VIRGINIA NETWORK WEBSITE

ITS collaborated with Mason partners, Old Dominion University (ODU) and Virginia Community Colleges, to launch a website for the Online Virginia Network (OVN).

Established with state support and sponsorship, OVN expands access to online degree and credential programs to benefit Virginians, public institutions of higher education, and employers. Mason and information technology units from ODU and Virginia Community Colleges simplified the process to help more Virginians finish their degrees online.

ITS, in collaboration with the Office of the Provost, Enrollment Management, and Academic Innovation and New Ventures, was instrumental in starting and supporting the OVN partnership by:

- Taking on tasks related to the acquisition, configuration, and administration of the environment to host the OVN website
- Providing ongoing contract administration support
- Collaborating with partners and vendors to build and support the website
- Working with partners to define and establish data requirements and standards
- Working on program and course data extraction and integration with the OVN website
- Participating in ongoing planning, governance, and administration activities related to operations support and expansion of the network



# ADVANCE STUDENT DATA DASHBOARD

ADVANCE, a partnership program between Northern Virginia Community College (NVCC) and Mason, has seen continued growth and success. ITS, working jointly with the Office of Admissions, Enrollment Management, and Academic Innovation and New Ventures, completed the following this year:

- Developed a dashboard to aggregate data from both Mason and NOVA student information systems to provide data to Student Success Coaches who work closely with ADVANCE students
- Laid the groundwork for identifying the next phase of this program, which will include deeper technology integrations and automation
- Continued to serve on working groups and committees to expand the services necessary to support new and existing students



### SUPPORTING THE TECHNOLOGY-RICH EXPERIENCE

ITS continually renovates and redesigns classrooms in support of the Mason strategic goal of delivering a "transformative learning experience that is experiential, global, and technology-rich." This year, ITS participated in several projects focused on adding new spaces to support Mason's growth, enriching the classroom experience, and setting the university on the path for innovative teaching and learning in the future.

#### Support Growth

- Working with Facilities, the Office of the Provost, and the Stearns Center for Teaching and Learning, ITS designed learning spaces (including web conferencing and wireless presentation capabilities) in the new Peterson Family Health Sciences Hall
- Growth in the INTO program drove the conversion of two ballrooms in the Mason Global Center into 13 fully operational standard classrooms

#### Enrich the Classroom Experience

- With an increasing emphasis on students taking classes in Active Learning Classrooms (ALCs), ITS updated Mason's signature ALC (Exploratory Hall, Room L102) to give faculty more flexibility and maximize the use of space
- In collaboration with the Stearns Center and Facilities, ITS renovated Buchanan Hall, Room D023, and added moveable furniture and new technology

#### Innovative Teaching and Learning of the Future

 Many of the renovations done this fiscal year are planned for the classrooms as part of the Core Campus Project; providing similar technologies in existing classrooms will prepare faculty and students for what is to come in new teaching spaces



### QUALTRICS ONLINE SURVEY TOOL

As research becomes a more vital part of the university's purpose and mission, ITS has played a significant role in providing resources that enable faculty and students to conduct the important work that advances Mason as a Carnegie R1 institution. A lot of this work relies on the use of online survey tools; however, multiple survey applications were in use at Mason, with many groups having individual licenses, even for the same software. In partnership with the Vice President of Research, ITS oversaw the effort to streamline the use of Qualtrics, a web-based survey tool, via the acquisition of a single university-wide license. Following the procurement of a site license that enabled centralized administration of Qualtrics, standards were set, such as Mason branding and authentication, and the tool was made broadly available for use across the university. Identifying Qualtrics as Mason's preferred survey tool provided the following benefits:

- Users of the various survey tools can now utilize the gmu.qualtrics.com brand
- Users, who previously used free versions of survey tools, now have access to enterprise-class features, such as unlimited distribution and robust analysis of survey data
- Users, who previously paid a fee for survey tools, may use those funds for other areas that support research
- Users, who were previously paying for their Qualtrics licenses, are now part of the Mason brand without losing autonomy
- Information collected using the tool is secure due to the use of Shibboleth single sign-on



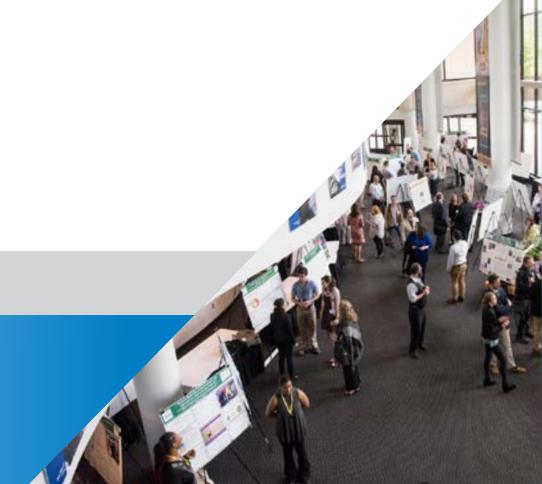




# ENTERPRISE CUI & PARTNERSHIP WITH RESEARCH

In response to a new federal standard to protect Controlled Unclassified Information (CUI), ITS and the Vice President of Research partnered to create a new virtual computing infrastructure to support research projects involving CUI data. The program and computing platform support Mason's goal of strengthening and growing its research and scholarship portfolio and status as a top Carnegie R1 research university in the nation.

ITS worked jointly with groups within the Office of Research, including the Office of Research Computing (ORC) and the Office of Research, Integrity, and Assurance (ORIA) to gather requirements and facilitate processes to support researchers' computing needs, develop necessary policies, standards, and processes, and develop a robust virtual computing environment with secure backup services. Additional input was gathered from stakeholders across Mason, including the Volgenau School of Engineering, College of Science, Office of Sponsored Programs, Internal Audit, and others. The CUI environment follows the NIST 800-171 R1 standard and is configured to support a range of computing needs, including Windows and Linux operating systems, customizable storage, and memory.



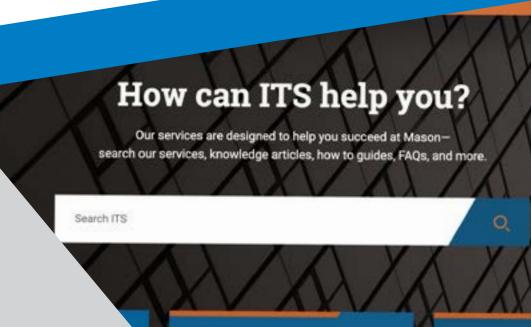
# REDESIGN OF THE ITS WEBSITE

With more than 15 websites, ITS's legacy online presence was disjointed, inconsistent, and often unhelpful. Information was splintered across several sites with no central owner to ensure information was current or correct. Often, customers had to dig through several pages to find the needed information or skip self-service and call the ITS Support Center instead. The need was clear for a central site that provided Mason students, faculty, and staff with a single user-focused web pathway to:

- Ask questions and request support
- Get information about and request ITS services
- Access knowledge and self-serve at the customers' convenience
- Provide a consistent experience that enables users to quickly and efficiently do or get what they want

This effort demonstrated "One ITS" in creating a single website, encompassing all ITS services. The project identified content owners within ITS to allow for better site maintenance, significantly improved accuracy of content, and created more clearly defined service categories.

During the redesign process, ITS moved to the WordPress content management system, which vastly improved search capabilities and Search Engine Optimization (SEO). The web designers used responsive design to allow customers the full site experience regardless of device.



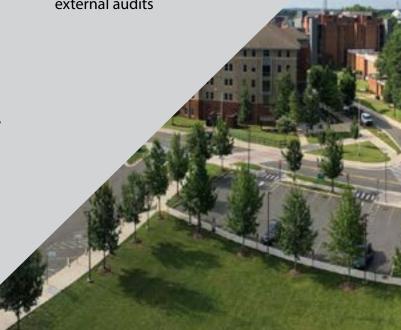
**Unplanned Outages** 

# PROJECTS THAT IMPROVE THE WAY MASON DOES BUSINESS

- Revised the IT Project Management Framework for continued support and management consistency of IT projects at the university
- Implemented Banner 9 Admin to support Mason's growth; integrated it with other ITS services, brought more servers online, and addressed federal regulatory compliance issues and user needs
- Supported the launch of MasonLEAPS, Mason's employee online learning management system, with required Banner integration that allows Mason to centralize the performance management process
- Assessed Office 365 collaborative tools and developed use cases to assist customers in choosing appropriate collaboration tools for their business needs
- Worked with Fiscal Services to develop recommendations for best practices and Banner enhancements that would result in operational efficiency gains for Fiscal Services, Student Accounts, and related operations
- Developed an enterprise data integration strategy, proposed a data governance model, selected a data repository and integration tool, and defined ITS strategic capabilities
- Engaged Cisco's Advisory Services group to execute network infrastructure assessments and a customized integrated report, roadmap, and implementation strategy to accommodate Mason's Smart Growth needs

- Developed a custom-tailored website for the Global Education Office to support recruitment efforts of the Global Gateway and STEM programs
- Partnered with Housing and Residence Life to replace RMS, a housing management application, with StarRez and provide required Banner integrations
- Completed operational maintenance to systems and services to keep business running
- Produced foundational software development lifecycle policies and procedures for implementation of all ITS application development teams

 Accelerated efforts to address outstanding audit issues from previous years, and completed remediation activities on 15 internal and external audits



# BANNER 9 ADMIN IMPLEMENTATION

Banner, by Ellucian, is Mason's primary data source and transaction processing system for students, Human Resources (HR) and Payroll, and Finance. Ellucian announced Banner 8 would be de-supported at the end of 2018. Not only did the user interface and features change and require a shift in business units' processes and systems, but ITS also needed to address federal regulation compliance issues, bring more servers online, and integrate Banner with other existing ITS services and infrastructure before launch. There were not many schools of Mason's size to reference as examples that had implemented Banner 9 at the scale ITS had planned. With the influx of technology change, the need to work on knowledge sharing became a high priority. ITS's in-house Jasper and JAVA programming expertise was key to Banner 9 implementation, as was setting up the servers. To enhance security, ITS worked to integrate Central Authentication Services (CAS) with Banner 9, which provided Two-Factor Authentication (2FA). ITS made further modifications to Banner 9 to tailor to users' business needs.

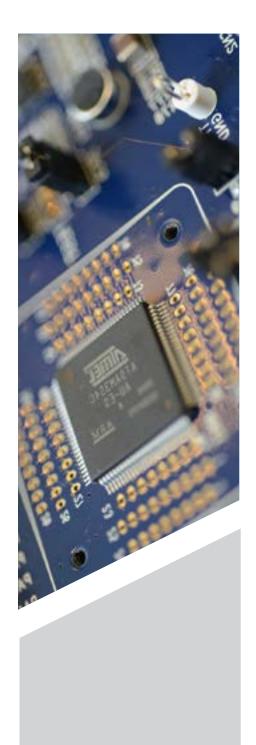


# INTRODUCING MASONLEAPS

ITS partnered with Human Resources (HR) and Payroll, and Compliance, Diversity, and Ethics (CDE) to implement the Mason Learning, Evaluation, and Performance System—MasonLEAPS, an online, self-service system tailored to integrating employee performance and professional learning and development at Mason. The new learning management system provides a centralized tool for the performance management process, which includes employee evaluation and training management and monitoring, tracking of performance goals and compliance trainings, and workshop registration. ITS supported this project with Banner integration to provide the system with employee information (e.g., hire date, supervisor name, etc.), workshop information and completion tracking, and three years of employee historical training data. The new platform aligns with the university's strategic goal to support employee purpose and career well-being and, as a result of shifting processes online, allows Mason to reduce costs by eliminating paper copies.



# DATA INTEGRATION: SPEED, EFFICIENCY, QUALITY & CONSISTENCY



To improve data integration processes in Mason's dynamic environment, ITS worked with consultants to study best practices and determine a course of action to provide a strategy for future data integration at Mason. ITS had to address the challenge of the wealth of data provided and used by decentralized applications and processes across Mason.

ITS developed an enterprise data integration strategy and roadmap, proposed a data governance model, selected a data repository and integration tool, defined key ITS strategic capabilities mapped to enterprise data strategy goals, established a mission and objective for the Enterprise Data Integration Services (EDS) function, recommended best practices (including artifacts), and recommended roles for the Enterprise Data Integration Services (EDIS) and Business Intelligence Services (BIS) teams.

One of the key objectives is to *reuse* existing code that would be stored in a repository within the integration tool instead of starting from scratch each time the teams receive a request. Reusing code will allow the teams to deliver high-quality solutions quickly, efficiently, economically, and consistently.

ITS purchased Informatica, an enterprise cloud integration solution, to solve the problem of complex and time-intensive data integrations with Mason systems, such as Banner, Salesforce, and other systems that will cover Extract, Transform and Load (ETL) for building data marts and data integrations.

Developing a data integration strategy and deploying a data integration tool will allow Mason to leverage data to conduct day-to-day operations, plan for growth, support the Student Experience Redesign (SER), and fuel Mason's research.

# DATA GOVERNANCE STRUCTURE FOR SMART GROWTH

In support of the Student Experience Redesign (SER) and Mason partnerships, ITS and the Office of Institutional Effectiveness and Planning partnered to ensure that Mason and those acting on its behalf have access to high-quality data in a timely manner.

Understanding that data is Mason's critical resource, the team developed a data governance structure that delivers data that is timely, useable, consistent, and secure, while managing risks to Mason and ensuring confidentiality and compliance with applicable laws. Data governance is an infrastructure and framework that will enable and promote secure, and easy access to data for individuals and offices.

Drawing upon expertise from multiple levels of employees across the institution, the team has developed data governance policies and data classification schema and established a Data Stewardship Committee (DSC). Next steps include cataloging and classifying the data according to the approved data classification schema then operationalizing and integrating with Informatica Enterprise Data Catalog (EDC) and Mason's Enterprise Data Integration Services (EDIS).



# IT PROJECT MANAGEMENT FRAMEWORK REFRESH

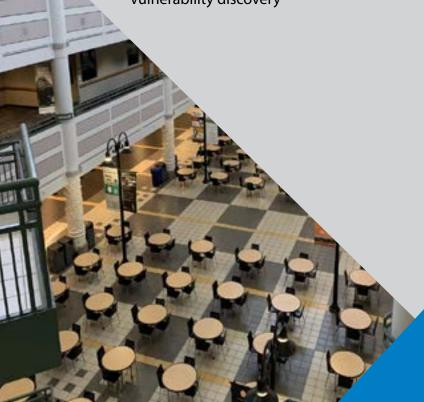
Mason has seen exponential growth and an increased dependency on technology over the last decade. The number of IT-related projects has increased across the university; however, the process for managing IT-related projects did not keep pace with that growth. The IT Project Management (PM) Framework is a standardized methodology that assists in identifying, classifying, documenting, and managing Mason IT projects. Acknowledging the need for strong project management and oversight to ensure projects meet their deliverables in a timely, cost-effective manner, ITS worked with key stakeholders from various units to review and refresh the project management framework.

The team eliminated procedures and documents that did not add value to the overall management of projects, streamlined the process to optimize time and resources needed to complete projects, and made a concerted effort to make processes and templates easy to understand and adhere to for users. Refreshing the IT PM Framework realigned it with Mason's current operating environment and maturity level and will help to ensure consistent management and delivery of IT projects moving forward.



# PROJECTS THAT IMPROVE INFORMATION SECURITY

- Completed the move of highly sensitive applications behind the VPN when accessing them remotely
- Worked with Gartner to assess Mason's security program relative to best practices, NIST, higher ed peers, and Mason's business needs and developed a strategic roadmap to optimize Mason's security program
- Improved the logging of Banner and Oracle to enhance the overall security of these sensitive applications and developed custom reports designed to monitor, control, and secure systems in the event of unusual activity
- Developed and implemented a new firewall strategy with enhanced security features for Banner
- Deployed the IT Governance, Risk Management, and Compliance program for collecting asset inventory and assessing server risk
- Implemented workflow for vulnerability remediation within ITS and the distributed space that enables scanning of Mason IP server space for inventory and vulnerability discovery

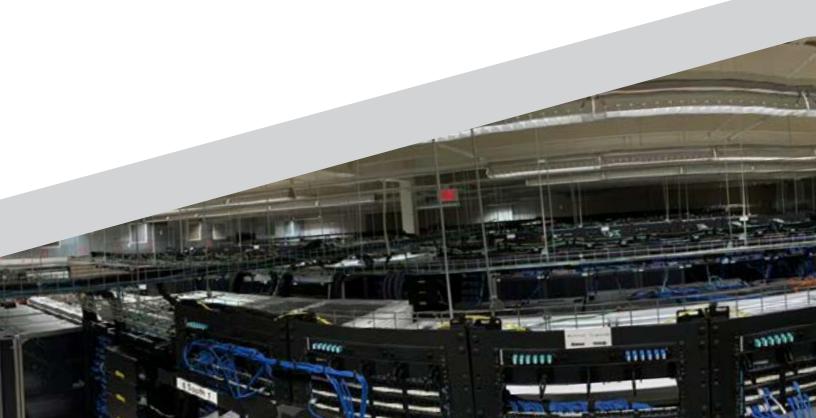


# IT GOVERNANCE, RISK MANAGEMENT & COMPLIANCE

To address the lack of a formal risk management lifecycle process and build understanding around where risk exists at Mason, ITS introduced the ITGRC (IT Governance, Risk Management, and Compliance) program. The program aimed to inventory, classify, and assign responsibility for servers connected to the Mason network. The program provides for lifecycle management of assets as new servers are identified, manages risk through the life of a server, and then ensures that servers are properly removed from the network once they are no longer needed. A plan was also developed to help ITS track servers for vulnerabilities, respond quickly in the event of a security incident, and work with managers, directors, and systems administrators to fix the problem within a specific timeframe.

The inventory identified approximately 2,700 servers in ITS and supported by academic and administrative groups across the university that were connected to the network. Servers were classified based on their risk (i.e., loss of confidentiality, integrity, and availability) in the event of a breach at Mason.

ITS is also able to use this program to provide risk assessment documentation in response to audit requests. For example, ITS can report on vulnerabilities and controls for critical systems and show the history of vulnerabilities and how they were fixed.



# BETTER SECURITY FOR BANNER

ITS expanded its use of Splunk, a Security Information and Event Management (SIEM) tool, to implement a new central log repository to monitor servers and identify threats and threat activity in Banner and Oracle. The program helps minimize the risk of improper configuration of servers and standardizes logging policies over multiple servers. It standardizes the information ITS receives from servers connected to the network and allows the organization to determine if system administrator privileges were used and detect intrusion. ITS can determine when systems were accessed and what work was done. When threat activity or an intrusion is identified, ITS can address the activity. Reports from the logs allow departments to identify what risks there may be to their systems to allow remediation. The tool gives ITS the ability to identify bad activity and system problems and understand threats to protect Banner and the sensitive information it contains.







# SENSITIVE APPLICATIONS BEHIND THE VPN

ITS has made significant strides in meeting its strategic goal to "protect Mason's information resources, balancing security and access." This includes completing the multi-year effort to develop and implement firewall rules and move sensitive applications including Banner/INB (now Banner 9 Admin), the Travel System, COEUS, and MicroStrategy, behind the Virtual Private Network (VPN) when accessing these enterprise applications from off campus, certain wireless networks, and public wired networks. This effort required input and resources from multiple teams to address many systems, extensive communication to users of these systems, and comprehensive coordination with other parallel projects including Two-Factor Authentication, but ultimately increased security at the university.



### **FY19 BY THE NUMBERS**

100%

**Technology Enhanced Spaces** 



**Classroom Spaces** Supported

47,541

Computer Lab Visits



9,565

**University Courses** Supported





12,010 STAR Lab Users

4,538 Virtual Computing Lab (VCL) Users

52,672 VCL

Reservations



STRATEGIC CAPITAL

MANDATES! MAINTENANCE

(14)

**49** Projects Submitted Through Governance





430 **Videos Created** 



800,000

Homes Reached Through Broadcast

6,132

Collaborative Learning **Hub** users

**CLUB** 

**Video Enhanced Courses** Supported

6,213 Students in Video **Enhanced Courses** 



20,179 **Mobile Mason Users** 



47%



37,696 Support Center Calls Answered



1,664 Videoconference & **Telepresence Events** 

6,839 **Dynamic Forms Used** 





20,300 **Duo Users** 



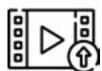


1,542 Webex Host **Accounts** 

20,000+

852,185

Kaltura Video **Plays** 



**ASRB** Requests **Finished** 

**67** 

Webex Sessions

50,094

Kaltura Video **Uploads** 



Avg. Monthly Users

1,185 **Banner Users** 





1,057,000,086

**Inbound Email Messages** 

**86% MESSAGES** REJECTED

5,112 Lynda.com **Courses Viewed** 

1,748 Lynda.com Avg. Monthly Users





1,615 Miles of Fiber **Optic Cabling** 



49,905 Office 365 Accounts



4,012,094

**Files** 

Servers 416 **NON-VIRTUAL** 183

Total **599** OneDrive

Bb

37,126 **Bb** Users

83% **Faculty Bb Users** 

2,061 MicroStrategy Users

594,916 **BI Reports Delivered** 



14 TB of OneDrive Storage

### **FY19 GOALS IN REVIEW**

#### PRESIDENTIAL THEME 1: EXPAND ACCESS TO EXCELLENCE AND TRANSFORMATIVE LEARNING

#### ITS Goal 1: Perform an ITS Instructional Services/Resources Survey with faculty across the university

Survey development is complete and will be administered by a consultant in fall 2019

#### ITS Goal 2: Review and revise the ITS Strategic Plan and develop associated high-level roadmap

• In the fall of 2018, ITS gathered a committee, comprised of staff in various ITS groups who volunteered their time, to revisit the 2017-2020 ITS Strategic Plan and assess our progress to-date

### ITS Goal 3: Collaborate with NVCC to define IT requirements; implement solutions for the ADVANCE program

Progress was made on this ongoing goal

#### ITS Goal 4: Support the Implentation of HelioCampus

- Data transfer was completed
- Enrollment Management, ITS, and HelioCampus continue to discuss and evaluate next steps, including uses of HelioCampus with Salesforce for the SER projects

#### PRESIDENTIAL THEME 2: GROW RESEARCH AND INNOVATION CONSEQUENCE

#### ITS Goal 5: Implement a secure, compliant environment for Research Computing

- CUI environment for Research Computing is now complete, with pilots already underway for testing purposes
- Controls were fully tested in July 2019

#### PRESIDENTIAL THEME 3: STRENGTHEN THRIVING, INCLUSIVE ACADEMIC COMMUNITY

### ITS Goal 6: Offer to ITS staff comprehensive information and access to organizational, leadership delveopment, and management training

Second Management Essentials cohort was completed in the spring of 2019

#### PRESIDENTIAL THEME 4: BUILD CAMPUS FOR THE FUTURE

### ITS Goal 7: Complete design for Facilities Capital Project: Improve Network Infrastructure, Phase I

 Budget for the first phase has been approved; work should begin in FY20

### ITS Goal 8: Complete implementation of Two-Factor Authentication for faculty/staff email and Blackboard.

 2FA for Office 365 will be provided as an opt-in; a 2FA Roadmap is underway

### **FY19 GOALS IN REVIEW**

#### ITS Goal 9: Complete high priority audit projects as determined by APA and Internal Audit findings

Fifteen audit projects were closed; some are pending validation

#### ITS Goal 10: Complete Banner 9 upgrade and develop plan for moving Banner to the Cloud

- Banner Student (Registrar) Self-Service module is scheduled for implementation mid-year 2019 with other modules (Finance, HR/Payroll, etc.) following in the fall of 2019 into early 2020
- Not all functionality for Banner 9 Self-Service has been delivered by Ellucian and this will affect the schedule for the remainder of the project

#### ITS Goal 11: Establish and institutionalize enterprise Data Governance structure as defined in FY2018

The Data Stewardship team meets regularly to work on data classification and policies

#### ITS Goal 12: Perform assessment on Wi-Fi network and begin implementation of recommendations

• Study complete; Awaiting final cost recommendations from Cisco

#### ITS Goal 13: Develop a Cloud strategy and implementation plan

- While the strategy template/document is not yet complete, ITS is actively moving services into the cloud, starting with a few proofs of concept: CAS and Shibboleth authentication systems (UNICON), Web/App tomcat servers (AWS Elastic Beanstalk), and enterprise backup (Rubrik to Azure)
- A Cloud readiness assessment was conducted by Amazon in June 2019

### ITS Goal 14: Commission an external assessment of our IT Security environment including as deliverables, a comprehensive roadmap

- Executive Summary was presented to Senior Leadership in April 2019 and to the BOV Audit Committee in May 2019
- Need to still determine resource allocation and timeline; work has begun but also awaiting hire of a new CISO

#### ITS Goal 15: Actively participate in the Robinson redesign portion of the Core Campus project

- Completed network plant move/reconstruction as part of site preparation
- Developed new network architecture to accommodate classroom a/v concept revisions and finalized furniture standards



### **FY20 GOALS**

#### PRESIDENTIAL THEME 1: EXPAND ACCESS TO EXCELLENCE AND TRANSFORMATIVE LEARNING

ITS Goal 1: Complete transition of support for technical aspects of CRM to ITS Enterprise Applications

ITS Goal 2: Design, administer, and analyze a survey of instructional faculty related to their experience with technology resources

ITS Goal 3: Conduct a GMU-TV technology assessment

ITS Goal 4: Collaborate with NVCC to define data requirements and needs for the 2.5 phase of the ADVANCE Program

#### PRESIDENTIAL THEME 4: BUILD CAMPUS FOR THE FUTURE

ITS Goal 5: Complete value maps for key IT services

#### PRESIDENTIAL THEME 5: INSTITUTIONAL EFFECTIVENESS

ITS Goal 6: Create a comprehensive plan for Two-Factor Authentication

ITS Goal 7: Complete implementation of Banner 9 Self-Service

ITS Goal 8: Submit a revised network remediation plan for Telecommunications Infrastructure Phase 2

ITS Goal 9: Formalize and socialize the IT Security Roadmap

ITS Goal 10: Evaluate current IAM practices and deliver recommendations for improvement

ITS Goal 11: Implement a data integration service and supporting infrastructure

ITS Goal 12: Develop a Cloud strategy and implementation plan

