Dear Colleagues, Distinguished Faculty, and Staff,

If I could choose one word to describe the past year, it would be “change.” To many it is a well-worn concept, but, from my experience, change is almost always a positive thing - positive for the University, for ITS, and for us as individuals. It gives us a chance to learn fresh skills, work with new people, and learn invaluable lessons about ourselves. I also see change as one of the most valuable aspects and learning tools in the IT field: with it, we are gifted with opportunities to expand our capabilities and build our community based on a dynamic and forward-moving culture.

The recent months have been just such a time. A time of extraordinary change where we were introduced to innovative ideas, people, and ways of looking at our IT environment and its utility in advancing the University’s mission. One important result of these changes was the number of advancements made in campus information technology and to the processes through which we deliver IT services to the LSU community.

I think most of us understand that technology change is inevitable and yet, to a greater or lesser degree, we all sometimes find it difficult to adjust to the pace at which that change occurs. With this in mind, our continued focus at ITS remains to develop emerging and existing skills and processes and institutionalize them into the full fabric of our services and how those services are delivered.

Over the past year, we also adapted to and adopted a tremendous array of changes in process, leadership, and direction throughout ITS. The department embraced ITIL practices and processes in a more formal manner and the Portfolio Management Office provided both ITS and other campus departments with guidance to effectively utilize and implement business process mapping and project and portfolio management methods. With these and other changes, we continue our mission to provide value to the University and to the greater vision of excellence in higher education at LSU.

The progress achieved in the past year did not come without hardship. As an organization, we experienced leadership transitions – with adjustments to nearly all leadership positions in less than four months – an unusual event for any organization of our size. But, due to the depth of experience, dedication, and quality of the ITS team, we were able to promptly and efficiently triage each hurdle and provide continued service with few interruptions.
Another important change was the implementation of an improved process to manage the pace and timing of strategic IT initiatives for the campus community. This fundamental shift emphasized the importance of monitoring the maturation of the Workday ERP and Higher Ed ERP in general, especially as a precursor to the implementation of a solution to eventually transition the A&M campus away from remaining legacy systems. This change also allowed for more time to investigate new, further developed solution paths for the plethora of application systems and services that remain on the legacy mainframe system.

The challenge for the oncoming fiscal year will be to continue the cultivation of a culture of proactive change throughout ITS, while smoothing and minimizing the potential risks of change to the University community. Through the recent adjustments that ITS has experienced, each of our teams has demonstrated a commendable caliber of resiliency and creative adaptability and will continue to do so as we strive to maintain our commitment to contribute to the success of the University. And, in the coming year, we will continue to foster and mature the leadership, cohesiveness, collective knowledge, and duty to service that has brought the central IT organization to this point. With these values, I believe that ITS will be even closer to realizing the vision for the future state of technology at LSU A&M, setting an example for IT within the larger University and further contributing to the academic, research, and operational success of LSU for years to come.

JOHN C. BORNE
Interim CTO and AVP
The strategic efforts, projects, and ingrained values of ITS strive to, above all else, enable Louisiana State University to thrive, not just survive. Since the University's inception, our community has repeatedly surpassed expectations: earning top percentile rankings among higher education and research institutions nation and world-wide and maintaining the highest status of distinction within the state. To continue this, we at ITS must obtain and sustain resources that adhere to the standards set forth by the University's historical and current achievements. Our service to the campus community directly supports the growing reliance upon technology which is at an all-time high. With both visible and behind the scenes efforts, ITS ensures that LSU students, staff, faculty, and researchers are equipped with the tools necessary to maintain a competitive edge alongside institutional and industry peers. In spite of changes in leadership and budgeting challenges, our teams continue to demonstrate our commitment to support.

In the future, we will continue to meet the expectations expressed by the LSU community. In anticipation of these goals, ITS has worked closely with the LSU community to plan, develop, and begin the implementation of a technology environment that is aligned with the unique requirements of the multi-institutional system, its students, and partners to create a highly collaborative, cutting-edge, and reliable tool prepared to accompany the University on the path towards the greater vision. The ideal future state of the institution requires a cross-campus, coordinated effort to develop a secure, efficient data environment, prepared to handle the increase of students envisioned by the University and the State; a high internal operations standard, equipped with knowledgeable staff and continuously improving processes; and a visible and active commitment to the enhancement of the University beyond the IT infrastructure. Now more than ever, we understand the requirements of this ideal state and by leveraging new momentum gained in FY18, set the foundation for more progress towards the ITS 2025 vision of a better IT infrastructure for Louisiana State University.
Building a secure and efficient IT environment

It is impossible for any institution to seamlessly transform a thirty-year-old outdated system into a modernized enterprise network overnight. Over the past 24 months, ITS has created and implemented a multi-faceted plan to ease the pains of transition while providing a secure and efficient enterprise IT infrastructure to the LSU community. Our leadership, project managers, and subject matter experts developed relationships with the campus community fine-tuning this plan to bring process efficiency, process function, and resource management into a larger conversation supporting enterprise, application utility, and business operation improvement. When developing these projects and creating the roadmap for the future, teams like IT Security and Policy (ITSP), the Service Desk (SD), and Enterprise Architecture (EA) take a variety of approaches to drive progress.

Security measures, such as Multi-Factor Authentication (MFA), have been implemented by ITSP to prevent cyber-attacks against the larger IT environment. Failure to prevent these incidents could potentially cause massive system or network failure or data theft. These precautions also serve to increase security compliance, which improves the odds for grant and research opportunities and funding. MFA, which relies on two or more forms of authentication including the user’s account and device, protects cloud-based applications, and enterprise services including e-mail and file storage from unauthorized access.

Implementation of support tools such as the new IT Service Management (ITSM) solution, managed by the SD, increases ease and breadth of support for and from all areas of the LSU IT environment. This tool supports our customer service vision and ties all ITS units together in a single change management process. The SD has also implemented a new staffing management strategy which has led to enhanced resource allocation and increased support capabilities. These changes have allowed the SD to field more support calls while also decreasing the amount of time our customers will need to wait on the phone to receive support.

The EA team assesses, plans for, and implements projects that affect both campus-wide and department-specific components of the enterprise IT system. Related efforts contribute to the modernization of foundational architecture and data infrastructure, the enhancement of organizational practices, and the re-platforming of outdated applications to decrease mainframe dependency. In each project, the team strives to increase the interoperability of department-specific resources and potential utility of shared-use applications.
Maximizing and Improving Operations and Resources

The vision for a transformed LSU IT landscape requires the understanding that staff resources, business processes and operations, and the enterprise IT system are not siloes – the only recipe for success is to take all three elements into account on the path to continuous institutional improvement. Through using ITIL and other widely accepted best practices, our teams developed solutions in the past fiscal year that maximize the potential quality and utility of staff resources, using feedback and understanding of what efficiency means in each unique department or team to contribute to enterprise solution customization and utility.

Internally, ITS demonstrated this through many initiatives, including the Next Level Leadership (NLL) series. This professional development seminar series nurtured the leadership skills of nominated staff members and provided them with the opportunity to attend presentations on critical leadership skills, share ideas, and participate in learning exercises to further cement the knowledge gained.

Actively Improving LSU Beyond Infrastructure

During the past year, our departments and projects often shifted focus beyond IT, applying effective practices to other areas of the institution to mitigate potential risks, enhance existing processes, and plan for the future of the University.

Since its inception, Risk Management (RM) has reviewed University processes for opportunities to reduce risk to the University and produced benefits such as saving the University over $15 million through strategic risk financing programs since receiving risk autonomy. To increase access to risk management information, the department redesigned their website to provide access to vital forms and information for students, faculty, and staff. RM also conducted 16 separate briefings across campus, covering topics not limited to contract risks, property claims, student trip travel, and flood kits. In the past year, RM reviewed the existing Driver Authorization process and subsequently developed and implemented a new automated process that more than doubled the number of approved drivers and successfully reduced the number of high-risk drivers.

The Office of Emergency Preparedness (OEP) developed and conducted training exercises and presentations designed to ensure students, faculty, and staff are aware of procedures in the event of an emergency like a natural disaster or active shooter. The department also continued to build relationships with emergency response entities, including federal, state, and local departments, to establish LSU as a local resource provider in the event of an emergency.
ITS Mission

The ITS mission is to deliver University-tailored and enterprise-grade technology infrastructure, security, applications, communications, and services to empower and enable the research, teaching, and administrative functions of LSU with little to no risks. To provide a transformative experience, ITS will embrace new technologies, pursue operational excellence, and employ industry best practices to inspire innovation in enterprise architecture and supply IT shared services to enrich the student, faculty, and staff experience at LSU.

ITS Roadmap

The primary focus of the past twelve months has been to continue the effort to modernize and enhance the services, infrastructure, and systems that ITS supports. To accomplish this, LSU and ITS leadership and institutional partners work together to guide the planning and implementation of mission-critical projects, the continued development of shared services, the enhancement of internal and external communications efforts, and maturing hybrid cloud infrastructure through the ITS Roadmap (featured on the following page).

The formalization of the IT Governance Council (ITGC) in FY18 has enabled change and modernization efforts to receive multifarious oversight, capable of integrating much needed processes and tools into the collection of autonomous, yet interdependent, entities that comprise LSU. The methods through which these changes have taken place have required the reorganization of the department, effectively positing each team to better develop cost-effective solutions, encouraging transparency, maximizing use of existing resources, and providing measures of value creation. The implementation of these methods was largely assisted by coordinated efforts among the Portfolio Management Office (PMO), the ITGC, and each ITS department and included formalizing PMO oversight of large project prioritization and stewardship, such as the implementation of a new change management process for all central IT updates.

With the intention of continuing the enhancement of ITS services, the Service Desk (SD) and the data architecture of ITS received significant attention. The SD propelled the transformation of the IT service experience into full gear, working in conjunction with other departments to design, refine, and implement new services, applications, and operations to better inform frontline staff as problem solvers; and to provide modern tools, uniforms, and processes to aid staff to further demonstrate the desired Gold Standard Service. To enrich the data architecture of LSU, ITS expanded use and further explored the utility of enterprise data visualization tools and administration and began to establish and formalize the parameters of a robust data environment that would outlive the mainframe and evolve with technologies and each campuses’ needs.
Core Focus Areas

Leadership Projects
These projects support LSU's Strategic Plan 2025 with focus on LSU Online, enrollment management, grant management, and scholarship management.

Mainframe Mitigation
These projects protect and preserve the mainframe and legacy application while minimizing legacy application reliance. They will focus on outsourcing mainframe operations and support, outsourcing or re-platforming mainframe systems and applications, and managing legacy staff resources.

Faculty, Research, and Student Support
These projects seek to provide affordable and robust technology solutions and support for faculty and students. They will focus on refining campus community-facing services and expanding support for digital learning environment tools.

IT Modernization
These projects seek to reduce mainframe dependence while moving forward with enterprise and student systems modernization. They will focus on the preservation, enhancement, and management of physical and virtual data and telecommunications infrastructure and systems.

Beyond the Core Paths

Shared Services
These projects seek to support resource-challenged units and campuses through business process and resource management improvements. They will be accomplished with the guidance of the CIO Alliance as a primary resource and the development of the IT Field Consulting service and the Shared Service Cadre.

Communications Efforts
These projects seek to increase community awareness of technologies and support for technology and cybersecurity. They will focus on creating campus-wide awareness of IT services, cybersecurity, and projects; foster stakeholder awareness of technology opportunities and risks; and enhance Workday support.

Hybrid Cloud Infrastructure
These projects seek to increase technology capabilities and reduce risk around disaster recovery and business continuity. They will focus on developing available hybrid cloud resources.
The ITS organizational structure is designed to respond to two primary objectives: the needs of the University community and the ease of efficiency with which ITS can support these needs. Both of these objectives embody the core mission of ITS. To develop the department, Leadership leans heavily on Information Technology Infrastructure Library (ITIL) IT Service Management practices, filtering modifications through the unique requirements of the LSU multi-institutional network to improve service quality and orientation; reduce cost and operational inefficiencies; and ensure role clarity among individual staff, teams, and departments.

ITS leadership was led by Andrea Ballinger, Chief Technology Officer, and is currently steered by John C. Borne, the Interim Chief Technology Officer (CTO) and Assistant Vice President. The three primary departments are Enterprise Architecture, Strategic Technology Services, and Service and Operations.

The following gives an overview of the 179 full time staff members and the structures and sizes of their departments and teams.

**ENTERPRISE ARCHITECTURE**

Enterprise Architecture is a five-team unit responsible for the design, planning, and realization of IT strategy for the enterprise system and ensuring the synergy of University operations and IT processes.

<table>
<thead>
<tr>
<th>Team</th>
<th>Number of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Intelligence</td>
<td>4</td>
</tr>
<tr>
<td>Responsible for designing, developing, implementing, and maintaining enterprise BI, data warehousing, ETL, and reporting and analytical artifacts, infrastructure, and related processes.</td>
<td></td>
</tr>
<tr>
<td>Central Unit Support</td>
<td>11</td>
</tr>
<tr>
<td>Responsible for providing the primary technical and business process support for the Executive and Central Administrative offices of the campus.</td>
<td></td>
</tr>
<tr>
<td>Legacy Support</td>
<td>10</td>
</tr>
<tr>
<td>Responsible for maintaining critical legacy mainframe systems and assisting with data transition to new environments as part of the IT modernization effort.</td>
<td></td>
</tr>
<tr>
<td>Production Support</td>
<td>15</td>
</tr>
<tr>
<td>Responsible for the day-to-day support of operations application systems and includes the Application Development, Integrations, and Database Administration teams.</td>
<td></td>
</tr>
<tr>
<td>Network and Infrastructure</td>
<td>30</td>
</tr>
<tr>
<td>Responsible for engineering, managing, and maintaining digital and physical infrastructures, some of which provide telephony and data networking services.</td>
<td></td>
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</tbody>
</table>
STRAIGHTIC TECHNOLOGY SERVICES

Strategic Technology Services is a four-team unit organized to strategically respond to the unique research and security needs of the LSU community through specialized IT services, comprehensive cybersecurity support, and targeted risk and insurance programs intended to serve, enhance, and protect the LSU IT environment.

<table>
<thead>
<tr>
<th>Team</th>
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</thead>
<tbody>
<tr>
<td>IT Security and Policy</td>
<td>11</td>
</tr>
<tr>
<td>Responsible for utilizing security policy, processes, technology, and awareness to protect systems, services, and data against unauthorized use, disclosure, modification, damage, or loss.</td>
<td></td>
</tr>
<tr>
<td>Research and Educational Technology Services</td>
<td>25</td>
</tr>
<tr>
<td>Responsible for the development, management, and delivery of IT services specifically for research and technology purposes. It includes the Faculty Technology Center, Academic Technology Services, Multimedia Classrooms, Computer Labs, and the High Performance Computing support structure.</td>
<td></td>
</tr>
<tr>
<td>Risk Management and Insurance</td>
<td>7</td>
</tr>
<tr>
<td>Responsible for the University's risk management and insurance programs. This includes insurance and self-retained financing covering property, liability, workers compensation, and other risks.</td>
<td></td>
</tr>
<tr>
<td>Louisiana Optical Network Infrastructure</td>
<td>10</td>
</tr>
<tr>
<td>A state-of-the-art, fiber optics network that runs throughout Louisiana, connecting major research institutions to one another and to services such as Internet2, high performance computing, and specialized IT consulting. LONI is a Louisiana state project which is run by the Board of Regents and contracted out to LSU.</td>
<td></td>
</tr>
<tr>
<td>Emergency Preparedness</td>
<td>2</td>
</tr>
<tr>
<td>Responsible for development, management, training, and implementation of disaster and emergency response and recovery efforts by and for the Baton Rouge-based LSU locations.</td>
<td></td>
</tr>
</tbody>
</table>

SERVICE AND OPERATIONS

Service and Operations is a five-team unit designed to proactively manage the expectations of LSU IT system users, while supporting and stabilizing service quality and delivery.

<table>
<thead>
<tr>
<th>Team</th>
<th>Number of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Management</td>
<td>6</td>
</tr>
<tr>
<td>Responsible for IT account management; procuring supplies and services; recording equipment inventory; and providing telecommunications billing services to students, faculty, and campus units.</td>
<td></td>
</tr>
<tr>
<td>Service Desk</td>
<td>19</td>
</tr>
<tr>
<td>The primary campus interface for IT services. It provides in-person, online, and telephone technical assistance to faculty, staff, and students and includes the Print Desk, Field Consulting team, and the GROK Knowledge Base.</td>
<td></td>
</tr>
<tr>
<td>Service Architecture</td>
<td>17</td>
</tr>
<tr>
<td>Responsible for monitoring mainframe services and applications, campus network equipment and services, campus and LONI network traffic, network security systems, and all external connections to the LSU network. It also includes the Network Operations Center, the Data Center facilities, Change Management, and Quality Assurance.</td>
<td></td>
</tr>
<tr>
<td>Portfolio Management Office</td>
<td>10</td>
</tr>
<tr>
<td>Responsible for coordinating a variety of projects aimed at modernizing the LSU IT environment and related processes using industry best practices and facilitating cross-department collaboration. It also includes the Business Process Management team, responsible for business operations review and optimization.</td>
<td></td>
</tr>
<tr>
<td>Talent Management</td>
<td>1</td>
</tr>
<tr>
<td>Responsible for managing professional and student employment opportunities.</td>
<td></td>
</tr>
</tbody>
</table>
When LSU developed Strategic Plan 2025, ITS Leadership committed to provide support worthy of this vision. The plan aims to posit the University as a repository for solutions, not just for Louisiana, but regional and global issues that affect populations on a social, economic, and environmental scale. ITS Leadership defined a future state for the University’s IT infrastructure that would deliver the framework, architecture, and opportunity for innovation necessary for this plan to excel. In completing the following goals, ITS seeks to fully transform the LSU IT environment into one that more than meets the needs of the community, surpasses the expectations of the Administration, and serves as an example for higher education IT.

Below is the current status for FY2025 Goals.

### 1. Institutionalize IT Governance and Good IT Practices

<table>
<thead>
<tr>
<th>Goal</th>
<th>Not Started</th>
<th>In Progress</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilize the ITS Portfolio Management Office to design improvements to business processes.</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Create IT Governance Subcommittees to enhance strategic decision-making.</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Develop and implement comprehensive data policies and strategies that emphasize data as an institutional asset.</td>
<td>X</td>
<td></td>
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<tr>
<td>Develop and implement a progressive IT financial management business model that promotes transparency, accountability, and enhanced decision-making.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct and formalize a multi-campus IT Shared Services strategy. Identify and implement a shared service and support philosophy, including the use of IT management tools and processes where it will improve the service and support experience for faculty, students, and staff.</td>
<td>X</td>
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</tbody>
</table>

### 2. Modernize IT Architecture

<table>
<thead>
<tr>
<th>Goal</th>
<th>Not Started</th>
<th>In Progress</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create an enterprise architecture strategy and formalize architectural principles.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimize and standardize current end-to-end business processes to use industry best practices provided by our administration systems.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review current administrative system customizations and remove or streamline any customizations that are unused or increase complexity for users.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build a shared-service institutional business intelligence environment to provide a common data access service that the entire University can use for learning, research, and administrative reporting and analytical needs.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design a flexible and cost-effective architecture for future data centers.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create an informative and transparent dashboard highlighting all IT activities.</td>
<td>X</td>
<td></td>
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</tbody>
</table>

### 3. Implement Student Modernization Project

<table>
<thead>
<tr>
<th>Goal</th>
<th>Not Started</th>
<th>In Progress</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement a modern student information system that meets the needs of students, faculty, and staff.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure data created from new systems can be utilized for institution-wide decision-making.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-design student related business processes for optimal efficiency &amp; effectiveness.</td>
<td>X</td>
<td></td>
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</tr>
</tbody>
</table>
### 4. Provide a Strong and Unified Research Infrastructure with Data and Capabilities that Enable Expansion and Innovation

<table>
<thead>
<tr>
<th>Action</th>
<th>Not Started</th>
<th>In Progress</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and build a NIST 800-171 compliant research infrastructure.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement an extensible research storage infrastructure that adapts to the changing needs of the institution.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaborate with LONI and Center for Computation and Technology (CCT) to design and implement the next generation high performance computing (HPC) cluster architecture.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordinate and expand the research support community across the university, providing technical support and knowledge of standard based best practices.</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Create business process maps, along with supporting technology, that cover the life cycle of research data from creation to publication and preservation.</td>
<td>X</td>
<td></td>
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</tbody>
</table>

### 5. Institutionalize Risk Management and Security Programs

<table>
<thead>
<tr>
<th>Action</th>
<th>Not Started</th>
<th>In Progress</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop metrics and reporting protocols to highlight key components of the LSU risk management program.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expand delivery of risk management knowledge and services to University departments through risk identification, analysis and evaluation; risk mitigation recommendations and solutions; collaboration; informational presentations; committee membership and meetings; education and training.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share knowledge and collaborate with LSU campuses regarding risk management issues and best practices.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create and/or update University policies and guidelines to improve outcomes and mitigate risks.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continually assess the performance of the University's risk financing program and external risk services; adjust such services or programs to best assist with risk management offerings and to reduce institutional risk efficiently and effectively.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop an IT security and compliance assessment process.</td>
<td>X</td>
<td></td>
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</tbody>
</table>
ITS celebrated much progress in the plan to support University revitalization during FY19 despite unforeseen organizational changes and shifting University priorities. The following are Master Objectives for Best Practices and more structured Modernization Goals. These were created as part of a purposeful formula to enhance enterprise IT systems and improve service efficiencies using formalized best practices. Advancement in these areas over the past year has encouraged expansion on the initial components of the milestones and offered insight as to how much more feasible and impactful modernization and transformation planning and implementation efforts can become.

**IT Governance Council**

The Information Technology Governance Council (ITGC) was developed to guide ITS’ implementation of the ITS Roadmap and collaborative, strategic transition into a Lean organization. The very function of the ITGC and its subcommittees is to encourage and embrace open, synergistic dialogue within the LSU community, including stakeholders, subject matter experts, and all LSU entities. Through ongoing communication and collaboration, the ITGC is actively seeking, encouraging, and implementing creative solutions for new and existing services and operations. This transformation of LSU’s view of the present and future of IT is deliberate, focused on modernization and transparency, and piloted by ITGC’s dedication to innovate and improve LSU IT services. ITGC’s oversight has led to the application of inventive operational and organizational modifications. These include the establishment of the Legacy Change Moratorium (LCM), intended to conserve and manage staff with legacy framework expertise, and the creation of the PMO, expected to measure ITS progress towards a Lean organization and assess large-scale changes to the IT environment. It also includes encouraging transparency in IT project approval through undergoing a business process mapping evaluation, requiring project sponsors to approach IT Governance before project approval and resource commitment. In addition, more recently, ITGC has formalized a working group tasked with reassessing the council itself, its purpose and mission as well as procedural mechanisms for how project requests come before the council. ITGC is committed to continuous self-assessment and improvement.

**Enterprise Architecture Committee**

Enterprise Architecture (EA) is an essential contributor to operational excellence. At its surface, EA serves as a cyclical framework that provides transparency into the process of technology adoption and application. Looking deeper, EA helps organizations achieve operational excellence by balancing the demands for knowledge creation, operational function, innovation, budget efficiency, security, compliance, and risk management. It supports the development of a coherent IT fabric by defining standards, identifying technology needs, and recognizing opportunities for shared services. At the same time, it contributes to the engineering and re-engineering of technology organizational structures as it seeks to fulfill those needs and exploit opportunities. The final result is a higher level of operational efficiency that maximizes the value and worth of technology resources.

**Service Desk**

The Service Desk (SD) has actively transformed the IT service experience for the LSU community through reorganizing staff roles, work-flow processes, and IT service management tools and enabling technology. The SD collaborated with other LSU departments to support the development of new applications and systems and to cross train staff among functional areas. As an example, cross-trained FTC staff could be more adept at serving broader faculty IT needs and the call center could understand the tools and services faculty utilize in support of teaching and learning.
ITS Organization Structure
Using ITIL-based standards of operational excellence as a guide, ITS has undergone and is actively fine-tuning a department wide reorganization aimed at sustaining a more effective and transparent organizational structure. This continuous process requires ITS to intentionally evolve, responding and adapting to internal and external forces, LSU community needs, and other circumstances that present themselves by modifying best practices to align with industry standards, LSU policies, and available resources. Development of the organization through the ITIL framework will effectually improve ITS’ ability to deliver solutions for enterprise needs that are malleable and well-suited for LSU’s unique IT needs, advancing progress within a growing tech field through clustering similar roles and encouraging inter-departmental collaboration for more innovative operations and business solutions. Primary objectives include increasing capacity to deliver on enterprise needs for IT solutions, providing professional development opportunities for team members, increasing responsiveness to change, measuring value creation, and measuring cost for delivering enterprise IT.

Portfolio Management Office
The LSU IT PMO is designed to assess requests for new technology or automation that surpass the scope of the Change Management team. Since formalization, the PMO has continued to transform and respond to varying IT challenges including capacity limitations, adapting to the evolving support needs of the ITGC and shifting ITS organizational structures. In support of the underlying charge of transforming IT at the University, the PMO’s initial activities involved augmenting staff with contract project managers and business analysts; and with developing standard processes, project intake procedures, and project management methodology. The PMO works closely with and receives guidance from the ITGC regarding approval of large projects, prioritization of projects, alignment with strategic objectives, and the organization of resource capacity. This collaboration is key to the oversight and success of the numerous and varied IT projects currently underway.

Data Architecture Environment
The first step to transforming the University network into a thriving data architecture environment is to build a viable foundation, rooted in an allegiance to innovation and a drive to implement and develop solution-oriented practices. This foundation will help with sustaining the work of the students and faculty, and bringing efficiency to the services of the administration and staff. To support the business of an evolving collegiate climate of technological innovation, ITS provisions and solutions that store, manage, and transform LSU data into information that can be shared in a secure and trusted manner for decision making.

Hybrid Cloud Infrastructure
Securing and transforming the data and data environments of LSU requires transforming the infrastructure where these components exist, ensuring that these systems and frameworks are sustainable and secure to carry the University into the future and capable of interacting with and maintaining both new sources of data and data that has existed for decades. To develop a modern path to achieving this future state for LSU IT, ITS is leveraging current on premises resources and expanding cloud storage and compute capabilities to establish a hybrid environment capable of supporting the modern enterprise system demands being designed and implemented at LSU. Teams are also employing an integrations framework capable of bridging different technologies. Essential to the success of this hybrid environment is the use of cloud-based data management software, which is the middleware between moving data between aging, custom-built mainframe and enterprise vendor solutions.
# FY19 Modernization Goals

## 1. Update Frey Center

<table>
<thead>
<tr>
<th>Task</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updating of high performance computing systems</td>
<td>Not Started</td>
</tr>
<tr>
<td>Converting fire suppression system</td>
<td>In Progress</td>
</tr>
<tr>
<td>Planning for generator and data center infrastructure upgrades</td>
<td>Complete</td>
</tr>
</tbody>
</table>

## 2. Update Server/Network Infrastructure

<table>
<thead>
<tr>
<th>Task</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update current business model for funding telephony, network maintenance, and life cycle replacement</td>
<td>Not Started</td>
</tr>
<tr>
<td>Identify and engage with cloud solution for gaps in research data storage</td>
<td>In Progress</td>
</tr>
<tr>
<td>Identify cloud solution for compliance with NIST 800-171</td>
<td>Complete</td>
</tr>
</tbody>
</table>

## 3. Student Systems Modernization Project

<table>
<thead>
<tr>
<th>Task</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit and feasibility project</td>
<td>Not Started</td>
</tr>
<tr>
<td>Student enterprise resource planning software implementation</td>
<td>In Progress</td>
</tr>
<tr>
<td>Geaux Forward Together: effort to assess multi-institution, accounts receivable, and LSU Online requirements</td>
<td>Complete</td>
</tr>
</tbody>
</table>
### 4. MAINFRAME DATA AND APPLICATION TRANSITION PROJECT

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Not Started</th>
<th>In Progress</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Save the mainframe data” project</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Parking application</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Identity and access management</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Imaging system</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Extract, transform, and load</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cashiering/payment processing system (Cashnet)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sponsored programs application</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Decommissioning of mainframe applications migrated to Workday</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### 5. CONSOLIDATE MULTIPLE ACADEMIC AND ADMINISTRATIVE TOOLS INTO ENTERPRISE APPLICATIONS

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Not Started</th>
<th>In Progress</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationship management</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT service management</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project management</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Visualization (Tableau)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Student Response Systems</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### 6. SELECT AND IMPLEMENT NEW ENTERPRISE ADMINISTRATIVE TOOLS

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Not Started</th>
<th>In Progress</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract management</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Business intelligence</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Enterprise time clock</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Education Advisory Board</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
ITS leadership and staff are proud of the progress made towards modernizing internal policies and processes, continuing on the path laid out in the previous fiscal year. These highlights are the culmination of operations, service, and IT infrastructure goals and indicators that the changes envisioned are implemented and fulfilling the needs for which they were designed.

**Developing protections for youth participating in LSU programs**
The Office of Risk Management (RM) received approval to coordinate the formalization of Permanent Memorandum 16: Protection of Minors Participating in University Programs and an accompanying outreach plan for the LSU community. This policy will safeguard youth in programs supervised by LSU and programs not supervised by LSU, but hosted on LSU property and provide operational guidelines for adults, parents, and LSU community members who are involved in qualifying scenarios.

**Supporting academia through modern technology**
The Faculty Technology Center (FTC) has provided considerable support to the teaching and research mission of the University. The FTC was key in the recent Moodle Pilot, designed to shape the future of the Learning Management System, and the implementation of the new automated Course Evaluation System. The FTC has also expanded the accessibility of resources and services, including establishing a Technical Support Provider (TSP) resource course, and adding digital and in-person courses for ADA compliance, Moodle theme and technology support, multi-factor authentication (MFA), and more.

**Modernizing infrastructure technology**
Implementation of modern technology at the University requires a foundation responsive to current and potential IT needs. The Enterprise Architecture (EA) team implemented a new Integrations Software Solution, furthering the vision for a modernized IT environment. This solution ensures that the links bridging on-premises to and from cloud-based data storage are secure, reliable, and prepared to support current and future software integrations.

**Modernizing administrative and research processes**
ITS teams are making progress towards migrating critical processes and data off the legacy mainframe and onto more modern, often cloud-based, alternatives. Many of these functional processes are the backbone of daily operations and require cross-functional collaboration and in-depth input from LSU community members affected by the processes to select a new, modern solution.

**Providing value through risk mitigation**
The Office of Risk Management (RM) continues to provide value to the University community and encourage operational and financial improvements through risk mitigation efforts across campus. Since being granted autonomy through the LA Grad Act, RM has saved the University over $15 million due to strategic risk financing programs, with the culmination of all insurance and funded retained losses resulting in only a 0.75% increase from FY18.
Supporting the ITS mission through enhanced organizational structure

ITS restructured the department to better align with and provide for changing University community needs and to reduce resource and operational inefficiencies. To best accomplish this, ITS departments shifted into Service, Enterprise Architecture, Research and Teaching, and Security sectors. Internally, these departments are poised to collaborate across areas of expertise, fostering existing knowledge and encouraging innovative technology solution development. Externally, they are better equipped to provide support to the University community, transforming operations through automation and modernization efforts.

Formalizing the Change Management Process

The ITS Change Management (CM) process was created to assess, authorize, prioritize, and manage changes across LSU IT systems. It also directs changes of varying critical impact to both the Portfolio Management Office (PMO) and the IT Governance Council (ITGC). In concert with the initial CM process establishment, the IT Service Management Solution implementation, and the operationalization of formal intake and change management processes, ITS continues to evolve CM into the right size and fit for LSU’s IT environment to increase value and mitigate potential risks.

Formalizing annual process of defining Objectives and Goals

The ITIL framework asserts that establishing clear definitions of accountability and responsibility are integral to the path of continual service improvement for staff and customers. ITS used this guideline to develop an authority matrix and formalize this approach to defining, assigning, monitoring, and recording progress for short and long term goals. This tracking method encourages continued support of process changes, maintenance of multi-year and multi-faceted initiatives, and comprehensive review of the overall progress and health of modernization and maintenance efforts throughout the year.

Attracting and retaining competent personnel

ITS completed a review of all current job descriptions in the department and defined career progressions for each role as a means to clearly communicate to staff what competencies are expected at various levels within a job title. In collaboration with LSU Human Resources Management (HRM), ITS is now conducting ongoing compensation analyses for each role. These efforts have already yielded forecasted benefits with an ability to articulate expectations and potential career paths to current and potential staff.

Enhancing the Portfolio Management Office

This past year saw the expansion and enrichment of the Portfolio Management Office (PMO) and the efficiency of services it provides, often in response to new and changing requirements for the University and customers. This evolution contributed to and was the effect of increased visibility for the PMO and use by members of the University community. In fact, in FY18 alone, the PMO completed 15 projects with campus partners that successfully modernized IT systems and reduced mainframe dependency.

Moving forward with Student Systems Modernization

The Student Systems Modernization program, or GeauxForward initiative, was created to select and plan the implementation of a student systems data management solution, reducing or eliminating the University’s reliance on costly, risky, and outdated legacy technologies. The program team collaborated across LSU institutions and with stakeholder representatives to conduct planning sessions and business process mappings and develop multi-institutional requirements necessary for software approval and implementation. The University ultimately declined to move Workday Student implementation forward and the program dissolved. ITS is currently partnering with functional teams using the information gained during the planning process to continue the search for an acceptable solution.
ITS Operations Highlights is an overview of some of the services that the department provided to students, faculty, and researchers within the LSU community in FY19. This includes improving facilities, hardware, software, and services; offering training for instructional tools; or sustaining a library of information and software exclusively for students and faculty. In alignment with the continuous service improvement practice, ITS has implemented a new IT Service Management solution, conducted an article flush of the GROK library, and maintained machine lifecycle renewal efforts. These changes have had an effect on the highlights that follow, and ITS hopes to see more improvement as modernization efforts continue into the next year.

### Labs
- **332,000** total logins across 11 labs
- **986,759** pages printed
- **175,049** total print transactions
- **50** new computers in Gear to Geaux
- **150** new computers across campus

### Network Operations
- **6,803** LONI trouble tickets closed
- **12,407** LSU trouble tickets closed
- **150** wireless access points upgraded
- **6** new firewall/VPN devices deployed
- **9,531** new network connections installed
### Faculty Technology Center (FTC)

- **485**: attendees to all events
- **105**: total events
- **32**: OU Campus trainings held
- **26**: ADA compliance trainings held

### Service Desk & FTC

- **21,360**: incidents reported via phone
- **384**: incidents reported via chat
- **16,764**: incidents reported via email
- **1,415**: incidents reported via 'other'
- **1,028**: incidents reported via web/portal

### TigerWare

- **14,884**: unique users
- **36,558**: software downloads

### GROK

- **8,138,303**: total article views
- **778**: redundant articles removed
Each department of ITS has contributed to the collective effort to mitigate spending and maximize resources. The bulk of this initiative has been carried out by the Financial Management team, responsible for negotiating purchases and licenses as well as managing accounts for each ITS departments. This page and the one that follows gives insight into expenditures and funding for all of ITS and expenditures for the Louisiana Optical Network Infrastructure (LONI), the Office of Risk Management (RM), and the Office of Emergency Preparedness (OEM) for FY19.

### ITS Funding Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>31,703,078</td>
</tr>
<tr>
<td>Institutional Restricted Funding</td>
<td>4,195,380</td>
</tr>
<tr>
<td>Sponsored</td>
<td>7,033,281</td>
</tr>
<tr>
<td>Tech Fee</td>
<td>2,433,231</td>
</tr>
<tr>
<td><strong>Total Funding</strong></td>
<td>45,364,970</td>
</tr>
</tbody>
</table>

### ITS Expenses

<table>
<thead>
<tr>
<th>Category</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary &amp; Benefits</td>
<td>15,444,195</td>
</tr>
<tr>
<td>Travel</td>
<td>108,431</td>
</tr>
<tr>
<td>Operating Services</td>
<td>2,435,063</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>1,835,110</td>
</tr>
<tr>
<td>Supplies</td>
<td>5,679,106</td>
</tr>
<tr>
<td>Professional Services</td>
<td>601,064</td>
</tr>
<tr>
<td>Other Charges</td>
<td>563,831</td>
</tr>
<tr>
<td>Equipment</td>
<td>902,128</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>27,568,928</td>
</tr>
</tbody>
</table>

*** Note there is a variance in expenditures from fiscal year 2018 to fiscal year 2019 which is primarily due to the dissolution of the GeauxForward project and its related professional services.***
### Office of Risk Management FY 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary &amp; Benefits</td>
<td>530,558</td>
</tr>
<tr>
<td>Travel</td>
<td>29,293</td>
</tr>
<tr>
<td>Operating Services</td>
<td>9,567,111</td>
</tr>
<tr>
<td>*Insurance Premiums</td>
<td>5,754,310</td>
</tr>
<tr>
<td>*Claims Administration</td>
<td>160,794</td>
</tr>
<tr>
<td>*Loss Prevention Projects</td>
<td>17,934</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>9,164</td>
</tr>
<tr>
<td>Supplies</td>
<td>36,235</td>
</tr>
<tr>
<td>*Loss Prevention Projects</td>
<td>22,374</td>
</tr>
<tr>
<td>Professional Services</td>
<td>523,161</td>
</tr>
<tr>
<td>Equipment</td>
<td>2,309</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>10,697,831</td>
</tr>
</tbody>
</table>

*Includes within parent category

### Louisiana Optical Network Infrastructure FY 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary &amp; Benefits</td>
<td>1,585,419</td>
</tr>
<tr>
<td>Travel</td>
<td>69,356</td>
</tr>
<tr>
<td>Operating Services</td>
<td>1,520,683</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>802,872</td>
</tr>
<tr>
<td>Supplies</td>
<td>1,109,450</td>
</tr>
<tr>
<td>Professional Services</td>
<td>2,556</td>
</tr>
<tr>
<td>Other Charges</td>
<td>9,959</td>
</tr>
<tr>
<td>Equipment</td>
<td>1,893,597</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>6,993,892</td>
</tr>
</tbody>
</table>

### Office of Emergency Management FY 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Services</td>
<td>98,670</td>
</tr>
<tr>
<td>Travel</td>
<td>424</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>1,389</td>
</tr>
<tr>
<td>Supplies</td>
<td>3,810</td>
</tr>
<tr>
<td>Professional Services</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>104,318</td>
</tr>
</tbody>
</table>
The IT Governance Council (ITGC) was formed as a means to concentrate institutional knowledge and serve as a guiding hand for the development of technology within LSU. The Council ensures that advancements and changes made in support of LSU IT are aligned with University needs and industry best practices, and provide the greatest benefit to the LSU community both for their requested purpose and for future technology developments. To do this, the ITGC directly evaluates and makes recommendations to leadership on broad policies and standards that affect LSU technology while the area-specific subcommittees, such as the Research Technology Subcommittee or the Data Governance Subcommittee, use more fine-tuned expertise to better support specific technology and technology-related areas.

**FY19 IT Governance Council**

**Chair***

**SANDI GILLILAN**

Associate Vice Provost, Academic Affairs

**ANDY MAVERICK**

Associate Dean, College of Science

**BARBARA REonas**

Assistant Dean, College of Engineering

**NEAL LAMONICA**

Associate Director, LSU Athletics

**LU PENG**

Professor, College of Engineering

**BRET COLLIER**

Associate Professor, College of Agriculture

**DARYA COURVILLE**

Executive Director, Sponsored Programs

**FY19 Ex-officio Members**

**JOHN BORNE**

Interim CTO, LSUAM

**DAVID ALEXANDER**

CIO, Pennington Biomedical Research Center

**KENNY BROWN**

CIO, LSU Health Sciences Center, Shreveport

**STEPHEN HEYWARD**

CIO, LSUE

**J. MICKEY KEEES**

CIO, LSU Health Services Division

**SHELBY KEITH**

CIO, LSUS

**JASON NORMAND**

CIO, LSUA

**KEN BOE**

CIO, LSU Health Sciences Center, New Orleans

**FRED PIAZZA**

CIO, LSU AgCenter
This past fiscal year, the IT Governance Council furthered the modernization narrative by continuing the development of guidelines, processes, and standards poised to improve enterprise and multi-institutional IT resources. These development projects come from direct or indirect requests brought to the Council through a digital intake form via the Portfolio Management Office, or escalated through the ITSM tool. The requests are then assessed relative to the following criteria:

1. Does the IT-related request meet the definition of Enterprise?
   a. Multi-instance (across units or across organizations);
   b. Associated with Enterprise systems and services used to store and manage data and processes; and
   c. Runs mission-critical software
2. Does the project introduce new functionality (not a direct replacement for existing applications)?
3. Does the IT-related request create the potential risk of a data breach in any enterprise system?
4. For LSU A&M Campus Only: Does the IT-related request require significant ITS resources (e.g., implementation, integration, data loads)?
   a. Significant shall be considered greater than 40 hours of ITS resource effort.

Requests that meet these criteria are guided through the review process in the form of a business case. This business case is forwarded to the relevant subcommittee and ultimately to the Council. The Council then reviews the request, votes to advance the request forward to LSU Executive Leadership and if approved, prioritizes the changes within the scope of IT resources and other requests.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Details</th>
<th>Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Management Business Case</td>
<td>The Title IX Case Management project manages the expansion of an existing case management solution, NAVEX, currently used by Internal Audit for investigations. The expansion includes management of cases related to harassment, discrimination, and misconduct for the enterprise Title IX Office, LSU A&amp;M Human Resources, and enterprise Internal Audit Office.</td>
<td>July 2018</td>
</tr>
<tr>
<td>Payroll Billing Business Case</td>
<td>LSU’s Payroll Department is seeking a Billing System or a Benefit Enrollment System that is reputable, stable, and proven to work to maintain enrollment, and/or billing and reporting of the LSU First Health Plan and LSU insurance liabilities (all employees, all retirees, and all campuses).</td>
<td>September 2018</td>
</tr>
<tr>
<td>I-9 Remediation Business Case</td>
<td>Human Resource Management (HRM) initiated a project focused on a software solution to insure that all future I-9s are compliant upon completion. Additional scope may include remediation of existing I-9 forms.</td>
<td>September 2018</td>
</tr>
<tr>
<td>ITGC Charter Annual Review Process</td>
<td>As defined in the IT Governance Charter, the IT Governance Council shall conduct an annual review of the Charter, including membership composition, to ensure continued effectiveness. Any recommended changes shall be presented to the full IT Governance Council for feedback and approval.</td>
<td>October 2018</td>
</tr>
<tr>
<td>Web Conferencing Solution</td>
<td>This project aimed to replace Cisco WebEx (“WebEx”) web conferencing with an alternative web conferencing solution.</td>
<td>October 2018</td>
</tr>
<tr>
<td>Legacy Change Moratorium</td>
<td>This process defines responsibilities and standardizes the process through which LSU campus entities can request and implement changes to IT services, the allocation of IT resources towards these changes, and the prioritization of requested changes.</td>
<td>October 2018</td>
</tr>
<tr>
<td>Top 20 Project Prioritization</td>
<td>A preliminary prioritization model was proposed and an initial list of 20 projects was approved. The scoring model continues to evolve to meet the needs of appropriately prioritizing projects according to an order of importance to the institution.</td>
<td>January 2019</td>
</tr>
<tr>
<td>Faculty 360</td>
<td>This project addresses changes that are required to make Faculty 360 more fully functional and less cumbersome for Faculty 360 users. The Faculty 360 Project team requested a project to provide ITS resource hours for critical data integrations.</td>
<td>January 2019</td>
</tr>
</tbody>
</table>
The ITS Service Catalog offers a comprehensive list of all IT services available to the University. Some of these services are reserved for students, faculty, and staff, while others are available to LSU’s surrounding community and family members. All services are available to respective users within the IT Service Management Tool accessible through lsu.edu.

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**Communication & Collaboration**

- cellular phones
- campus phone enhancements
- web site management
- cable tv
- myLSU Web Portal
- conferencing
- email & email-related services
- instant messaging
- document sharing
- campus phones

---

**Endpoint Computing**

- software discounts
- computer lab software & machines
- software provisioning
- printing
- Gear to Geaux
- hardware repairs
- support

---

**Security**

- vulnerability management
- consultation
- policy & compliance
- secure computing
- identity management
- incident management
Administrative & Business

data virtualization design & administration
operational data store design & administration
application design, development, & administration
integration design, development, & administration
cloud-based third party product management
reporting & analytics design & development
database design & administration
on-premises application management

Workday design and administration
IT project management
mainframe administration
document imaging
source system reporting administration
cloud-based application management

Teaching & Learning

learning management solution
educational technology consulting
educational technology training
enterprise integrations into Moodle

classroom it
lecture capture
digital imaging services

Infrastructure

network monitoring
network data connection
network registration
DNS
data center IaaS

training
wireless
mainframe services
MyProxy
data center physical server infrastructure

Need an IT Solution?
Access the IT Service Management Portal to:
Submit a new ticket
View open tickets
Contact the Service Desk
Contact the FTC
Throughout FY19, ITS teams have continued to demonstrate an unrelenting commitment to servicing the LSU community in daily operations, sustaining critical University processes and tools; providing IT solutions, maintaining and enhancing the Service Desk and other campus-facing teams; and modernization efforts, working internally and with campus entities to improve and innovate existing systems and infrastructure.

Due to the unique needs of the campus community – from assistance given to the Coastal Sustainability Studio whose students create designs that assist in local and regional flood
mitigation efforts to the introduction of a solution for the automation and virtualization of case management for Title IX processes – ITS staff are able to pool knowledge and skill resources to further customize, modernize, and innovate the LSU IT experience.

The following pages provide a glimpse into the diversity of the departments that ITS interacts with, the cross-functional nature of many of the projects that ITS undertakes, and solutions that ITS provides while simultaneously responding to customer needs and pushing forward on the modernization path.
Advancing the modernization of the multi-institutional IT network of LSU in FY19 has required a multifarious approach to achieving the future state envisioned two years ago. In this process, ITS has prioritized data and service access and management, the security of virtual and physical IT infrastructure, and resource management. This ongoing effort is supported by ITS staff recognizing the need for change, but also stems from University staff recognizing inefficiencies in processes and technologies housed on the enterprise and subsequently reaching out to ITS for solutions.
Optimizing Enterprise Data Management

Efficient enterprise data management is especially critical to the operational success of an institution like LSU because of the role that it plays in the supporting the University’s mission of generating, preserving, disseminating, and applying knowledge of and cultivation of the arts. This includes informing strategic decision-making, managing University funding and expenses, assisting instruction and learning, and providing services to the members of the University community.

The enterprise data accumulated by LSU is physical or electronic and is created, collected, managed, or recorded by or for the University for administrative or transactional purposes by the University or affiliated entities. Analysts then synthesize this data and make it available for academic units: decision makers and compliance authorities, such as University administration or federal agencies. LSU is charged with maintaining and securing this data not only because it is key in developing accurate, timely decisions that impact the University community, but also because authoritative and sponsor entities; federal and state laws, policies, and regulations; and institutional rules require this information to be accurate and secure.

In order to ensure these objectives, the IT Governance Council (ITGC) has directed the Data Governance Working Group (DGWG), co-chaired by Institutional Research and ITS Business Intelligence, to develop the Enterprise Data Repository (EDR). To accomplish this, the DGWG has convened a dedicated consortium of data specialists from various campuses and departments to propose a future state of the enterprise data management process based on a detailed review of current functional processes, proposed solutions to deficiencies, and suggested applications of compatible best industry practices. The effort may include the revision of multi-institutional data policies and processes that will recognize and manage institutional data as an asset of the University, connect data across functional units, improve accessibility and security, and set a roadmap for enterprise data management across LSU.
Tracking Progress in Security Threat Management

Over the years, the need for increased cyber security precautions has risen exponentially. The global upsurge of phishing, malware, and identity theft has spurred ITS to continue existing measures and ensure that IT security is a critical component of every facet of the modernization effort.

In support of this, the Information Technology Security and Policy (ITSP) Team has implemented programs to track and assess security measures currently in place, investigate future risks, and ascertain security solutions that can be integrated into the enterprise environment to best serve students, faculty, staff, and University partners.

Most recently, the University has moved to implement a number of cyber security safeguards including Multi-Factor Authentication (MFA), which enhances the security of user accounts by providing an additional layer of verification for certain cloud applications. LSU is currently in the initial stages of MFA implementation for the entire University community and plan to enroll all student, faculty, and staff accounts by the end of the Spring 2020 semester. Once the initial rollout is complete, ITSP will assess additional Enterprise applications that can be migrated into and be more protected using MFA.

Have Security Questions?
Contact the ITSP for information on:
- Email Security
- Identity Theft
- Passwords
- Data Classifications
- Data Security
- IT Security Policies
- Sensitive Information
- Incident Response
Modernizing Data Center Infrastructure Security

The LSU data center, located inside of the Frey building on campus, and the backup data center in David Boyd Hall house the computer, telecommunications, and on-premises data storage tools that support critical University functions. These tools include enterprise IT system components, like the virtual server and storage infrastructure; equipment for academic departments; high performance computing (HPC) systems used by the University and LONI subscribers; and mainframe systems.

Plans to upgrade both data centers are included in the modernization of infrastructure, security, and compliance efforts. This past year, ITS teams got to work planning, procuring, and installing a new standards-compliant fire suppression system for the Frey data center.

The new system features aspirating detection technology that facilitates faster smoke detection by using optical sensors that can reveal smoke within a network of pipes located throughout the building. The current extinguishing agent to be released in the possible event of a fire is a non-conductive nitrogen gas and water mist hybrid which is 90% less expensive, much safer for humans, and less damaging to machinery than the previous system. Lastly, the system is controlled by a fire alarm control panel, fully equipped to detect and report possible fires to key personnel and first responders and monitor the system’s functionality and efficiency.
Assessing the Funding Model to Ensure Sustainability

To ensure the sustainability of the IT Funding Model for the University, the IT Funding Model Subcommittee was convened and charged with assessing the current funding scheme, current gaps, and a future state. In September 2018, the Subcommittee presented a set of recommendations to the Chief Financial Officer, Dan Layzell, for consideration. These recommendations were developed in order to increase efficiencies, maximize the return on investment, and improve technology funding.

To continue the move forward, resources will be dedicated to review and consider replacements for the Telecommunications funding model, which is currently based on the number of active network nodes. One potential option is a headcount model, which focuses on improving recruitment, staff mobility, cost reduction, and a higher return on equity; or a general fund model, which prioritizes accountability over profitability. Other recommendations were made regarding frequency and structure of billing for various IT services. Due to organizational changes, further review of funding model components, including network funding, has been put on hold and is scheduled to continue in the near future.

Verifying Efficiency in ITS Funding

In FY19, ITS implemented a zero-based budgeting methodology to improve internal spending and ensure funding of mission-critical initiatives. The new process requires account managers to submit funding requests for their departments, each of which would be granted based on their alignment with operational and strategic needs. This change in practice came as part of a number of ITIL methodology adoption recommendations, such as Lean, aimed at advancing strategic initiatives by reducing wasteful spending and increasing growth for strategic initiatives that support modernization. In the recent fiscal year, efforts made possible by this method adoption include expanding IT knowledge resources through third party collaborations and consultants, procurement of new tools for modernization efforts, and acquiring integrations tools in support of LSU’s unique IT environment.
ITS secured an expanded contract with Gartner, the world’s foremost research and advisory company, in support of increasing and optimizing operational knowledge and effectiveness. This trusted, comprehensive resource now provides IT professionals at LSU with access to resources through the Gartner Technical Professionals (GTP) online portal. With this tool, IT staff can stay above the fold of an evolving IT field with the ability to search for cutting edge topics and research solutions, ask questions and discuss resolutions with Gartner analysts, and participate in a diverse community consisting of IT professionals around the world – resources aimed at building, sustaining, and innovating different sectors of IT.

This investment is especially vital to all aspects of ITS’ modernization efforts. Using substantiated data contained within the GTP, staff are able to reference tried and true practices, documents, and roadmaps to inform significant decisions, like moving mainframe assets to a cloud-based environment, and set paths for new initiatives to continue evolving IT at LSU.
The program’s unique focus on soft skills versus hard provided me with valuable skills and knowledge to advance and thrive professionally and personally.

- Ashley McGowan
  Analyst, Risk Management

In addition to modernizing LSU networks and infrastructure, ITS enhances professional resources as a means of activating the innate comprehension and encouraging the active application of foundational values. One way that this is accomplished is through the coordination of a professional development seminar series developed to mature leadership skills among nominated staff.

“For me, one of the most valuable lessons or experiences from the Next Level Leadership sessions was to know myself,” says Peggy Milligan, IT Manager. “In the presentation by Kerry Sauley on personalities at work, it was like a light bulb went off as to why I am so exhausted since becoming a manager. I realized from his presentation that I have always been an introvert when it comes to work.” Through her involvement with the summit, Peggy found ways to manage her work day and increase her own productivity.

Participants like Peggy were exposed to presentations and practical exercises that improved their management, leadership, decision-making, public speaking, and emotional intelligence skills over the course of six months. Speakers and field experts from within ITS, the greater LSU community, and abroad were brought in to give the presentations, all of which encouraged attendees to observe, assess, and reflect upon their own managerial and social skills in a constructive and enriching context.

Ashley McGowan, Risk Management Analyst, felt that the program pushed her past her self-imposed limitations: “When NLS concluded, I felt inspired and motivated to continue introspection as I evolve into a more authentic, effective, and accountable leader.”
GUIDING MODERNIZATION THROUGH BUSINESS PROCESS OPTIMIZATION

In the Business Process Management (BPM) Office’s inaugural year, three major departments – Human Resources, Athletics, and the Office of the Bursar – participated in 15 separate current state review sessions where the BPM collaborated with respective staff to map out business processes, gaps in operations, and areas that could benefit from improvement.

From there, the BPM continued to collaborate with the staff, unique knowledge resources, and field specialists, identifying a total of 71 opportunities for improvement and tangible benefits. Using this information, the BPM devised avenues these departments could take to implement the changes and further improve their service to the LSU community.

This past fiscal year, the BPM client roster increased thereby widening the scope of the collective modernization of LSU enterprise services and operations for many A&M campus departments including the English Language Orientation Program (ELOP) and the Center of Academic Success (CAS).

In the ELOP, the primary process inefficiency identified concerned providing adequate access and support to the students serviced by the office. At the end of each semester, the Director must meet with students to discuss progress and areas of concern but had been unable to due to issues with scheduling both on the part of the Director and the students. The BPM team worked with the Director to implement a time management solution and effective planning practices for advanced scheduling to ensure students’ awareness of the Director’s availability. This solution has decreased student frustration and allowed the Director a greater capacity to meet student needs, giving each student the opportunity to adequately plan for the next steps in their academic careers.

In the case of CAS, the staff sought a modern solution for data manipulation. One of the services that CAS provides is presenting funding requests to the administration. To do this, the CAS staff obtained and manipulated data to identify which courses would benefit most from having an associated Supplementary Instruction session by using an application that proved manual and time consuming. The BPM team collaborated with the staff to identify Tableau, an application that the department already had access to, as a solution that would be easier to use, improve process speeds, and meet many of their digital information technology needs.

The Portfolio Management Office has been instrumental in providing our office a venue to examine current business practices and identify areas where processes and practices could be made more efficient. While documenting the current state our team was able to identify some quick fixes, which were implemented immediately. During the future state, we were able to identify short and long term solutions, which will help us achieve a more automated state. Overall, the PMO has been highly beneficial in providing our office with a formal method to review the “hows” and “whys” of the work we do, thus allowing us to improve the student experience and internal business process.

- Christina M Coovert, PhD.
Assistant Director of Data and Operations, LSU Student Success
The project began with identifying the scope of the project, identifying and choosing a vendor, and implementation of the software through launch. I’m so thankful for the PMO as there was so much I didn’t know that I didn’t know about the process. Our project manager kept us updated and on target with dates and the budget. The leadership of the PMO team was integral to completing our project.

- Jennie Stewart
Title IX/ADA Coordinator

The Portfolio Management Office (PMO) coordinated a large-scale initiative to implement and operationalize a digital reporting tool to manage, analyze, secure, and measure Title IX, Human Resource Management (HRM), and Internal Audit case material. The office gained input from stakeholders representing each University campus and brought various teams from within ITS, including ITS Security and Policy (ITSP) and Production Support, together with third party vendors and LSU Strategic Communications to select a superior tool for their case management process. The chosen solution ensures real-time, accurate reporting of cases and maximizes the efficiency of investigative staff by increasing and accurately defining control and access of data.

Before the PMO coordinated a solution, cases were maintained in paper files and Excel spreadsheets. The new system collects records in a digital format and brings a decrease in the labor and supply costs associated with case file collection, management, and archiving. Due to the assistance of the ITSP, the solution features a centralized virtual environment for staff to securely share and store private data. To increase awareness of the new resource, the PMO included a communication plan which produced and promoted an Ethics, Integrity, and Misconduct Helpline and Website to ensure that members of the LSU community can anonymously send any claims or reports directly to the investigating departments.

**IN NEED OF PMO OR BPM SOLUTIONS?**

Contact the PMO for information on:

- Project Management
- Enterprise IT Solutions
- Access Management
- Business Intelligence
- IT Modernization
- Business Process Management
JOINING FORCES TO OPTIMIZE RESOURCE MANAGEMENT

LSU Financial Accounting and Reporting processes are vital in modernizing and improving the enterprise system, infrastructure, and applications network of the University. In 2016, LSU made the decision to upgrade Human Capital Management (HCM) and Financial processes to Workday in an effort to enhance resource development and improve operations. The effects were immediately visible in many departments across campus, as evidenced by increases in resource management, refinements in operations, and expansions in reporting capabilities.

ITS continues to work collaboratively with departments to expand the capabilities of Workday, developing solutions responsive to the needs of University community processes. For example, Athletics is required to produce, submit, and present compliance and accounting reports each year to both internal and external entities such as the National Collegiate Athletic Association (NCAA) and University Administration. Athletics joined forces with Accounting Services and ITS, leveraging Workday to access data necessary for each report, identifying common and critical variables, configuring unique input methods for those needs, and developing output templates that pull data specific to each report that the department needs. This streamlined a process that would have originally required a month’s work and multiple Excel worksheets down to mere minutes, all while containing the tasks within Workday and maintaining compliance with the requirements of Accounting, Athletics, and other entities. Athletics staff have remarked that the new process is “better than it was in the mainframe” and that it makes accounting terms and processes more comprehensible.

Further collaboration has enabled Athletics to reconfigure Workday, patron, athlete, and other valuable data by utilizing Tableau, the University’s preferred data visualization software, to more effectively communicate in business presentations to University leadership.
Exceeding Standards in Workers Compensation

Risk Management (RM) staff worked with University employees and supervisors to ensure they have the support needed to recover from their work-related injuries and return to their post. LSU has far outperformed public entity peers with only 8% of workers compensation claimants missing more than seven days of work, compared to the 20% industry average. The RM team effectively engaged University departments and developed critical partnerships to achieve the lowest number of claims since 1988, when claim record-keeping began. At this past year’s annual workers compensation program stewardship presentation, RM recognized Facility Services for their vital assistance in claim reduction efforts.

In addition to the impact the University’s Workers Compensation program has had on the campus through assisting injured employees, the RM team was also recognized as an industry leader. The Director of Risk Management and the University’s claims administrator were selected to present on the University’s Workers Compensation program at the 2019 University Risk Management and Insurance Association’s (URMIA) annual conference.

“...the program is being run on a high professional level and we are seeing better down times, better communication, and less abuse.”
– Fred Fellner
Assistant Director, Facility Services
Risk Management (RM) prides itself on producing new processes and tools to modernize University business operations and reduce and eliminate potential for risk. One particular challenge given to RM this year was the administration of the University’s motor vehicle use procedures and driver authorization process. RM took over the program on July 1, 2018, where the University had only 525 authorized drivers reported. However, as of June 30, 2019, the University has more than 1,340 approved drivers - an increase of 155%. To achieve such remarkable results RM staff analyzed the existing procedures, eliminated the unnecessary and strenuous requirements, and published the new protocol in a web-based format. In addition, the authorization process was moved from paper to an automated online process.

The changes that RM implemented brought the driver’s authorization process in compliance with University policy; prevented several high-risk drivers from gaining authorization; and reduced the chance of injury, property damage, and claims.

"The new process is easy to use, reduces the administrative burden and most importantly with the status updates I can now be comfortable with who is approved to drive."

— Lauren Evans
Front Desk Coordinator, Department of Geography & Anthropology
Although ITS keeps the virtual environment of the University alive, a significant responsibility of ITS departments is to support instruction and learning for faculty, students, and researchers. Far-reaching efforts, including expanding the Service Desk and FTC services to support the various needs of campus entities, preparing the University for emergency situations, and improving Moodle capabilities, require ongoing dialogue in order to maintain relevancy and utility for both ITS and customers. More specific efforts, which are conducted by request, include providing wireless expansion, technology enhancement, and field service support. ITS teams also provide industry-specific and competitive internships, cutting-edge programs for students, and access to highly advanced computing services and services support for complex research.
Providing Equal Access to People with Disabilities

Facilitating information and technology accessibility is a critical priority of the University as it supports equal access for all students, faculty, and staff. Whether the individual in need of accessibility support is a faculty member whose new course needs to be brought up to compliance or a staff member who is updating a public-facing department web page, everyone plays a part in recognizing and implementing opportunities to optimize access for their fellow Tiger. Accessibility efforts also bring LSU in compliance with state and federal laws, such as the Americans with Disabilities Act (ADA). Bringing the University to ADA compliance is a campus-wide effort that requires every part of the community to participate and collaborate. To further motivate implementation, the University and the US Department of Education’s Office for Civil Rights requires all new digital content to be ADA compliant according to Section 504 of the Workforce Rehabilitation Act and the ADA by August 31, 2019.

ITS ensures that the University continues to design and support ADA compliant applications and services for students, faculty, and staff who have disabilities or require unique access. LSU Strategic Communications is currently remediating all lsu.edu websites while the Faculty Technology Center (FTC) and many other ITS departments are supporting compliance and subsequent digital ADA-related efforts by working with academic units, faculty, and staff to bring student-facing content into the fold. These efforts include, but are not limited to, assisting instructors as they create and optimize online documents and course content, videos used for teaching and learning, and other instructional and research materials that may be present on the LMS and LSU-affiliated sites. In the past year, the FTC has organized two special training sessions for the College of Art and Design in order to explain ADA requirements and how to make content accessible.

The FTC also acts as an exclusive service desk for faculty, connecting departments with ITS staff whose skills are best suited to provide the necessary accessibility support. More specifically, the FTC provides assistance in the form of individual consultations, training workshops, reference documentation, and presentations.

I have been quite concerned about assuring our department could comply with making Moodle and other on-line materials in our department accessible to persons with disabilities by fall. My faculty is largely assistant professors working toward tenure who do not have a lot of time to work on this. Greg responded almost immediately to all of my many emails and helped me troubleshoot the various problems that popped up. Our project never would have been launched if not for his help."

- Janet Norris
Professor, Speech-Language Pathology
Chair, Communication Disorders

Need FTC Services?
Contact the FTC for information on:
Workshops
Webinars
One-on-One Consultations
Virtual Assistance

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ENHANCING ACCESS TO IT SERVICES

When in need of technology solutions, the LSU community turns to the ITS Service Desk (SD) for assistance. Because a significant portion of ITS activity does not require direct interaction with students and faculty, the SD acts as a one-stop shop and first point of contact, bridging the gap between ITS and LSU students, faculty, staff, and alumni through service and support. SD staff fully embrace their role as IT ambassadors and, whether customers call, email, walk in, or submit a request through the IT Service Management tool, they remain committed to providing Gold Standard Customer Service: professionalism, relationship-building, and transparency.

In recent years, the SD developed a plan to enhance their utility to customers and develop an enterprise caliber service in alignment with the operational transformation currently underway at ITS. Recent implementation milestones have resulted in improvements which have increased communication and visibility: implementing the use of enabling technology by analysts and measures to increase brand visibility such as a uniform of branded polo shirts, displaying banners in Middleton and Frey Service Desk locations, and installing a live call statistic dashboard and strategic furniture layout within the Frey location.

The SD also supports ITS teams in a variety of projects, including the recent successful Cyber Security Awareness campaign in October of 2018. In this project, staff assisted the IT Security and Policy Office to increase awareness of cyber security dangers and proactive measures with topics including traveling precautions, phishing, the vulnerabilities in Internet of Things (IoT) devices, passwords, and e-commerce and online shopping.

The launch of the new IT Service Management tool was another project in which the SD’s assistance was of great value. From planning and development to implementation and support, the SD staff aided the backend transition from Footprints to the current solution and provided quality assurance and beta testing. They continue to provide support as the people behind the screen, routing service tickets to the best possible respondents and providing solutions wherever possible.

**NEED SD SERVICES?**

Contact the SD for information on:

- Submitting Tickets
- GROK
- Technology Support
- Digital Media Services
- Accessibility Assistance
- Administrative Computing

INTRODUCING ADAM CLARY, DIRECTOR OF THE ITS SERVICE DESK

Adam, pictured on the opposite page, has served LSU in various IT roles across campus for over 11 years. Prior to moving to ITS in March 2019, Adam worked with several programs in the Stephenson National Center for Security Research and Training where he helped establish and manage several world-class IT Service Desk operations. Adam and the ITS Service Desk team are working every day to improve the customer support experience for the LSU community.
Confronting Challenges in Coastal Sustainability

The ITS Field Consulting (FC) team was developed to address the growing need for affordable solutions to IT support for departments across campus. Obtaining consistent and sufficient IT support can often present a quandary for departments who must weigh their need for an IT support person against the daily cost of keeping one on staff. Units like the Coastal Sustainability Studio (CSS), whose needs vary from month to month and project to project, greatly benefit from FC services.

“We can go for months without needing support and then Bam!” says Mary Bergeron, Assistant Director of the CSS, when describing the ebb and flow of her department’s IT needs. “The nature of a lot of the work that we do is graphic intensive and the nature of the applications that we use is a lot more robust than your average office IT support needs.”

The CSS is a multi-disciplinary studio that serves as a creative intersection of engineering, architecture, and design with a focus on multiple aspects of coastal restoration and sustainability and other critically impactful environmental issues. The students that utilize the studio use programs that do everything from interior design content visualization to 3D prototyping to complete work that is supported by grants from entities like the National Academy of Sciences which require adherence to specific software and security compliance requirements. The FC team consists of certified IT professionals who can be deployed to any department at a set cost. CSS requested FC services to provide comprehensive IT support including upgrades, licensing, and resolving connectivity issues.

The FC team has supported a great many CSS projects, such as planning and implementing scaled designs at the Center for River Studies and assisting the Tangipahoa Parish Government in actively reducing the historic flooding issues in direct response to the floods of 2016.

Need FC Services?
Contact FC for information on:
- Contracted IT Support
- Software Support
- Hardware Support
- Server Support
ENHANCING RESEARCH EFFICIENCY

ITS is home to a number of High Performance Computing (HPC) systems located in the HPC department and the Louisiana Optical Network Infrastructure (LONI) program. These systems are used by students, researchers, government, and industry partners. Both HPC and LONI deliver readily available support to these end users who provide services, develop networks, and conduct research throughout the state. The relevancy of the computational power of these machines has increased in recent years, due in part to the increasing demand for new solution methods and innovations in exploration among a number of fields including coastal modeling, radiation pathology, and computational systems biology. These systems have some unique features including up to 1.5 TB of memory on some nodes, 380 nodes with GPU accelerators, and many other formidable capabilities, which are also key in pushing the limits of emerging scientific fields.

Dr. Scott Hagen, the Laborde Chair Professor of Louisiana Sea Grant Program and the Director of LSU Center for Coastal Resiliency, and his team use the computational power of the LONI QB2 cluster to develop and test storm surge models, simulating supernormal weather patterns and studying their effect on flood trends. Their work produces data that the Coastal Emergency Risks Assessment (CERA) uses to advise local, state, and federal entities in matters of storm surge and wave impact for potential and active tropical events.

Dr. William Donahue, a recent graduate of the Physics and Astronomy Doctorate program, chose to complete his dissertation on whether there was an effective computational method to study the effects of radiation injuries to the circulatory systems of inner organs (the effects of radiation vascular injury in whole-organ vasculatures) because, before he began his research, there were none. He mentions that without the collaboration of members of the HPC team, his dissertation project, which required a 90 hour simulation for 2 million protons on an 8.5 billion vessel network, would not have been able to develop the system of algorithms that predicted the effects of radiation on blood flow within entire organs connected to the circulatory system.

Dr. Michal Brylinski and his team in the Computational Systems Biology Group (CSBG) sought to devise a method of predicting the interactions between drugs and potential drug target proteins. Using readily available databases and HPC resources, his team developed a molecular-level resource based on technologically advanced predictors that successfully matched 715 known drugs against 922 potential drug targets found in rare diseases, thereby increasing opportunities to treat rare diseases with accessible drugs.

“I sincerely appreciate the time he spent improving our code. His expertise on supercomputer helps to move our project to a higher level. Once three manuscripts are submitted, we should look for new opportunities to benefit UL Lafayette and LONI.”

Dr. Wu Xu, Associate Professor of Chemistry at University of Louisiana at Lafayette, worked closely with a dedicated member of the HPC team during his team’s venture to analyze the structure of 1,800 proteins. With the code improved, a process that would typically require 500 hours was reduced to mere minutes.
Over the past year, the Office of Emergency Preparedness (OEP) coordinated summits, trainings, presentations, and exercises to better prepare students, faculty, and staff for possible emergency situations. These activities, which educated nearly 1,500 participants, were conducted in concert with local law enforcement and emergency response personnel, and presented information used by similar federal and state programs.

The active drills and trainings, including the East Baton Rouge School Safety Summit conducted in July of 2018 alongside Mayor-President Sharon Weston Broome’s office, the Baton Rouge Police Department, and the East Baton Rouge Parish School System, covered a range of material. Participants learned response coordination; information, resource, and service management, surveillance, and response to psychological and physical health threats; and myriad other critical factors in the event of an emergency.

On campus, OEP has participated in active shooter drills with UREC staff and, in coordination with Athletics and Environmental Health, held evacuation trainings with nearly 300 game day staff members.

Continued coordination and communication with administration and campus departments continues to strengthen preparedness measures conducted by the University and the EOC. This enables the development of a concerted and streamlined approach to emergency response, poising the University to deliver optimum support to both the campus, local, and regional community if necessary.

PREPARING INDIVIDUALS AND COMMUNITIES FOR EMERGENCY SITUATIONS

Need OEP Services?
Contact the OEP for information on:
LSU Emergency Messaging  LSU Mobile Apps
Emergency Kits  Emergency Training
Envisioning the Future of Moodle at LSU

ITS collaborated with the Academic Technology Advisory Committee (ATAC) to explore how to further develop the hosting and delivery environment of the open source learning management system (LMS), Moodle, as part of the larger effort to modernize the LSU learning experience. LSU began using the LMS in 2008 as a solution to replace two existing concurrent but separate systems and has since fully ingrained it in the University’s instructional environment. The Faculty Technology Center (FTC) provides classroom and one-on-one Moodle training for instructors in both traditional and LSU Online programs.

During the Fall 2018 semester, ITS conducted a joint voluntary pilot where 46 instructors from LSUAM and LSU taught a mixture of traditional, blended, and online courses to more than 3,500 undergraduate, graduate, and doctoral students. These participants tested a new Moodle-based environment facilitated by Open LMS (formerly MoodleRooms) and featuring the Snap theme. The pilot included features that are not offered in LSU’s current LMS environment, most notably the Ally accessibility tracker and the Personal Learning Designer. The pilot did not include custom integrations and features unique to the University’s current environment, such as specific grade book settings, Moodle Mail, and the Projected Final Grade feature.

A voluntary anonymous survey distributed to both students and faculty at the end of the pilot found that one-third of respondents approved of the new environment, one-third were indifferent, and the final third did not approve. Faculty respondents indicated that Ally, the embedded accessibility checker that reviews instructional materials uploaded to Moodle, is an effective tool to increase ADA Compliance within the LMS environment and recommended it as a welcome asset to the LSU Moodle offerings. The Online Accessibility Working Group ultimately made a favorable recommendation to the Provost in favor of purchasing Ally.
Advancing Opportunities for Students

ITS directly contributes to the success of LSU students and graduates by working in concert with the Information Systems and Decision Sciences (ISDS) Department in the College of Business to provide mutually beneficial experiences for both LSU students and supplemental resources to the University administration through an internship program.

This joint endeavor prepares University students with tangible job experience in an ideal location where they are able to both attend classes and actively observe and contribute to practical applications of information technology, business acumen, and information systems that shape daily operations at ITS.

This work experience endows students with an experience competitive with positions in leading organizations; an opportunity to work in a responsive, transformational IT culture; a head start on possible post-graduate employment; and earned credit for their ISDS program.

Students who participate in this program have typically exceeded expectations, seizing opportunities to obtain knowledge and training beyond the prearranged program objectives, executing tasks diligently and comprehensively, and even using knowledge gained at other internships to strengthen the program for the future. Graduates of the internship have either successfully obtained employment in the field or have chosen to stay on as full-time ITS employees.

“The presenters were knowledgeable and enthusiastic about the subject. Intro to Python, Intro to Python for scientific computing, and Intro to R were all engaging and well-paced for people with a moderate amount of programming background.”

Libby Reiner, an undergraduate student in the School of Electrical Engineering and Computer Science, is one of the nearly 100 participants representing eight different institutions who registered for the LBRN-LONI bootcamp. She attended the event as part of the Research Experience for Undergraduates (REU), a program created for students to collaborate on different computational science projects that is hosted by the Center for Computation and Technology (CCT) and supported by the National Science Foundation (NSF).
Enabling Education in Emergent Technologies

ITS recognizes that high performance computing and related research is integral to development of research and potential scientific innovation in current and future generations. At the forefront of the many fields that benefit from this complex and emerging sphere are the students, scientists, and researchers that learn, work, and experiment together, using their knowledge and creativity to find answers to existing problems and increase efficiency within the tools they use to accomplish their current and future work.

This past spring, the Louisiana Optical Network Infrastructure (LONI) partnered with the Louisiana Biomedical Research Network (LBRN) to host the 2nd LBRN-LONI Scientific Computing Bootcamp at the A&M campus, providing a platform to encourage the further development of a community that thrives on next-level knowledge and collaboration. Participants of the bootcamp engaged in three days of scientific computing programming and computational study knowledge development that included a comprehensive overview of the software, hardware, and processes of scientific computing, an advanced introduction to the Python programming language, and a crash course in the evolution of deep structured learning based on artificial neural networks.

Dr. Kevin F. Hoffseth, who attended the bootcamp, is an Assistant Professor in the Department of Biological and Agricultural Engineering whose work weaves biomedical engineering and the mechanics of materials into clinical applications. More specifically, his research seeks to improve the status of cortical bone tissue following orthopedic operations. After attending, Dr. Hoffseth commended facilitators: “I think it was well done and had a lot of valuable content. I'll have to send my graduate students to the next one.”
Expanding Wireless Coverage Across Campus

ITS collaborates with nearly every campus department to sustain and improve the technology that supports each and every student’s daily activities and instruction. Some collaborations, like Workday implementation, affect the entire community. Others, like the wireless network upgrade of the School of Veterinary Medicine (VetMed), are discipline specific and significantly improve a program’s offerings for a large contingent of students.

Some time ago, leaders at VetMed recognized that the originally installed wireless network, which did not provide adequate coverage throughout the program’s buildings, was in need of an update and reached out to ITS’ Network Engineering and Architecture (NEA) team to assist. The ultimate solution that they envisioned would expand coverage to high user-density areas in several classrooms, a 358-seat auditorium, and auxiliary buildings.

Using a plan devised by NEA, the Technical Architecture and Network Construction (TANC) team guided the Network Operations Center (NOC) team and resources from Transformyx to implement the design. In less than two years, old switches and patch wiring were removed and replaced, existing wireless access points and switches in good condition were upgraded, and more of these were added in six high user-density areas. The wireless capacity of the primary test-taking facility, which had been recently rebuilt, was increased to accommodate a new technology, ExamSoft, which enables students to securely complete tests on their own devices and provides instructors with scores and student performance analyses. Voice over Internet Protocol (VOIP) capabilities were installed where applicable and reliable indoor/outdoor wireless capabilities were expanded to seven auxiliary buildings including labs and animal patient facilities.

Need IT Infrastructure Services?
Submit a Trouble Ticket for:
- Wired/Wireless Network Upgrades
- Telephony/VOIP/Mobile Support
- Cable TV Support
- Active Directory Support
ITS services include emergency response relief — much like the aid the Student Health Center (SHC) received immediately following the electrical fire of 2016 that caused nearly 1.7 million dollars’ worth of damage to nearly 7,000 square feet. The area disturbed by the fire directly affected the SHC’s primary care services and, for a department entirely supported by student fees, left them with two choices: either shut down — which would deprive LSU students of the services that they pay for — or find a fast and efficient way to make things right. They chose the latter.

The SHC IT Manager reached out to ITS to find out what could be done. ITS instantly recognized that the efficiency of both the electronic health record and compliance with health regulations would be cornerstones to the relief measure. Using space untouched by the fire and smoke, ITS helped to create temporary exam rooms, labs, and offices, allowing the SHC to reopen the following Wednesday after the fire. D’Ann Morris Thompson, the Executive Director of the SHC, observed how uncommon it is for multiple offices to come together with the “level of expediency” needed to make this happen. She added that it demonstrated the “collective expertise that exists within the Frey building and what ITS can offer to the institution as a whole.”

The collaborative effort didn’t stop there — over the three years that followed the two departments would work together to restore and improve the facility. ITS stood by SHC as they worked with external architects, electricians, and other groups to ensure accountability and transparency among all parties. D’Ann and the SHC staff were grateful: “ITS saw the need for the recovery work and found an efficient and effective method. We had to transform what we had — hallway spaces, closets - into offices and exam rooms. ITS came in and laughed, but worked with us and the external groups to fill in knowledge gaps because they knew what we wanted and how to make it stronger. Without the tech help, we would not have been up and running the Wednesday after the fire.” Azim Ashraf and the Telecommunications Architecture and Network Construction (TANC) team were particularly helpful. “They could have done a small portion, but they said ‘we’re here to help and here to help you make it better’ and kept bringing people into the discussion and adding to the value.”

By the time the SHC reopened in 2019, patron services included enhancements which didn’t exist before the fire. For example, more wireless access points were installed than existed before and were configured for the current use of patient kiosks and the future use of wireless iPads and VOIP phones.

“Instead of doing what’s easy, ITS came in and said ‘let’s do what’s right’. They met this challenge head on and did this for the student body.”
- D’Ann Morris Thompson
Executive Director, Student Health Center
**Continuous Improvement**

ITS departments support myriad daily University processes and operations, departments and functions. To continue to do this, teams include maintenance of existing systems when planning for modernization and teaching and research support solutions. This consideration typically consists of ensuring data, application, and system preservation and protection, functionality continuity, economic viability of the IT system and support services, and quality and consistency of campus IT support.
Since the formalization of the modernization taskforce in 2011, ITS departments have dedicated innumerable hours and resources to construct the vision for a mainframe alternative, the plan to decommission the existing mainframe while migrating data and applications to a new environment, and the strategy needed to maintain the mainframe until the vision is actualized. Although each part of this process is uniquely critical, mainframe decommissioning and maintenance are particularly vital chiefly because they ensure that daily University processes are sustained throughout all phases of development.

Modernizing the enterprise system is a hugely complex task. Decommissioning the mainframe and migrating its contents to next level systems requires all of the data housed on the mainframe to be saved (as expressed in the Save the Data project). Migration requires solutions to be developed for all requirements of existing mainframe data and related applications and environments, this data to be transferred from the mainframe to a home developed from those solutions, and integrations developed for mainframe data that does not yet have a modern solution but must interact with newly implemented systems.

ITS teams are, at any given time, actively planning, implementing, or wrapping up projects that lend to any one of those mainframe modernization tasks. In addition to providing campus-wide IT support, developing innovations for the LSU IT infrastructure, and responding to an evolving academic technology field, ITS works with members of the LSU community to ensure that implemented modernization solutions are fiscally responsible, make efficient use of resources, and support student, faculty, and staff processes and efficiencies.

During FY19, significant headway was made in the first phase, the Save the Data project, bringing it to 72 percent completion and the overall decommissioning project to 30 percent completion. The second phase consists of completing the same actions for remaining systems, like student systems. It will begin once the complete vision is approved and a strategic path forward has been developed.
“Risk Management has provided budget stability since risk autonomy while also providing expanded coverage and services”

– Tommy Smith
Associate Vice President, Budget and Planning
Vice Provost, Finance

DEMONSTRATING EFFICIENCIES IN SPENDING

Risk Management (RM) staff continue to develop methods of adding value to the University’s financial outlook through effective operation of the University’s risk financing programs. The process by which the University approaches risk is aligned with the “plan, do, check, act” (PDCA) cycle found in ITIL continual service improvement frameworks, favored by ITS as well as the International Organization for Standardization (ISO) 31000 standards used by RM. The ISO 31000 emphasizes strategic and continuous process and policy design; transparency; organizational inclusivity, accountability, and responsiveness; and business operation improvement and risk reduction and elimination.

Since being granted autonomy through the LA Grad Act, RM has recognized savings of more than $15 million as part of its strategic risk financing programs. RM staff performs an annual analysis to determine the University’s best use of resources in financing risk by utilizing the most efficient coverage, limits, and deductibles (retained losses). The past fiscal year was a very positive year for the University as the culmination of all insurance and funded retained losses resulted in only a 0.75% increase from the previous year.
ENSURING IT SERVICE QUALITY THROUGH STAFF DEVELOPMENT

ITS exists as a resource for the hundreds of Technology Support Professionals (TSPs) who support departments across campus. ITS ensures that a wealth of guidance material, knowledge resources, and communication lines are accessible to TSPs to assist them in their duties.

At the beginning of this year, the Faculty Technology Center (FTC) began to offer a TSP Resource Course, developed with the input of a team of senior TSPs and delivered by subject matter experts from ITS, as a comprehensive foundation of knowledge for front line support providers in order to best serve their areas.

The course consists of an overview of ITS services, including communicating with ITS; understanding the campus network environment, security, and active directory domain services. Although the TSP Resource Course is presented as a classroom lecture, it is also available to TSPs as an online module through Community Moodle, available for review at any time, and periodically updated to ensure the course remains a valuable, evolving resource.

This year’s iteration saw more than 100 participants for the seven classroom sessions and 20 individuals who opted for the online module. The FTC created an online assessment and subsequently provided applicable participants with certificates of completion.

“It was very useful for getting my analyst up to speed on the basics needed. I thought the quizzes were a good test and the PowerPoints were adequate to give you an overall view of policies.”

– Cody Collines
Computer Manager, University Recreation
The previous pages give insight into the high-level goals and objectives designed to support the roadmap and LSU Strategic Plan 2025 as well as narratives that provided more context about the services ITS provides and
interactions ITS has with the University community. In the following pages, each department and team’s individual contributions to these initiatives are shared in greater detail.
Multi-Media Classrooms (MMC)

- Completed FY19 life cycle replacements, including assistance in A/V replacements for 54 rooms.
- Administered changes by completing Extron Global Viewer IP-based system update, assisting in Student Union basement cable delivery system update, and transferring Lockett 232 machines to the Math department.
- Worked on projects with multiple campus entities such as Academic Affairs, LSU Agriculture School, LSU Business Education Complex, and Facility Services.

Computer Labs (Labs)

- Refreshed desktop configurations and expanded VLAB pools on VSAN cluster including a GPU–enabled engineering desktop pool.
- Refreshed campus physical lab desktop configurations including reopening a public access lab in Patrick Taylor 1350.
- Updated virtual machines by expanding VLAB pools on VSAN cluster, creating a GPU-enabled engineering desktop pool, and implementing VEEAM as the VLAB backup solution.
- Reopened a public access lab in Patrick Taylor 1350, including the deployment of three new printers and a print station.

Faculty Technology Center (FTC)

- Completed the first year of a resource course for Technology Support Professionals (TSPs).
- Assisted in campus-wide ADA Compliance measures including 26 courses to train faculty and staff and working directly with departments to make University resources accessible.
- Expanded services to include support for: the new Moodle theme; enterprise LMS technologies; enterprise software such as Faculty 360, Workday, Box, Zoom, and Blue; new electronic research administration software, InfoEd; LSU Online digital template; online training; and faculty to navigate email security and multifactor authentication (MFA) updates.
- Collaborated with faculty members to conduct a pilot test of a cloud-based future version of Moodle.

High Performance Computing (HPC)

- Delivered 95,292,574 CPU-hours in 251,890 jobs submitted by 539 users from 9 institutions in Louisiana, representing 404 research projects.
- Collaborated with the Open Science Grid (OSG) and the Laser Interferometer Gravitational-Wave Observatory (LIGO) to develop a data access strategy for experiments.

Academic IT (AIT)

- Implemented Zoom to replace WebEx as the University’s web conferencing service.
- Reduced University spending by nearly $10,000 by initiating migration of Panopto from an on-premises service to a cloud-based SaaS.
- Conducted LMS testing of Blackboard Open LMS and Ally accessibility checker with a panel of faculty from LSUAM and LSUE teaching live courses.
Louisiana Optical Network Infrastructure (LONI)

- Provided the Laser Interferometer Gravitational-Wave Observatory (LIGO) in Livingston, LSU-S, and Grambling State University (GSU) with a 10G fiber optic connection, establishing GSU as a new LONI subscriber.
- Hosted 2nd Annual Summit which included the first C# roundtable discussion among IT leadership.
- Sponsored a guest speaker to the 2018 CISD Annual Conference on coastal research who utilized LONI services to complete Louisiana-focused research.

Office of Risk Management (RM)

- Maintained an environment where only 8% of workers’ compensation claimants missed more than seven days of work compared to an industry average of 20%.
- Increased the University’s number of approved drivers from 525 to 1,340 through administering the University’s motor vehicle use procedures and automating the driver authorization process while reducing the number of high-risk drivers.
- Saved the University more than $15 million through strategic risk financing programs since being granted risk autonomy.
- Achieved lowest number of claims since 1988.

IT Security and Policy (ITSP)

- Implemented Vulnerability Management Program improvements, Office365 security controls, Workday Security auditing enhancements, and initiated multi-factor authentication for LSUAM.
- Collaborated with multiple campus entities to address General Data Protection Regulation (GDPR) requirements and consent language within forms.
- Collaborated with Auxiliary Services to modify the LSU network to accommodate third party vendors, their needs, and Payment Card Industry (PCI) Data Security Standard compliance.
- Implemented measures that contributed to decrease in successful phishing campaigns on campus.

Office of Emergency Management (OEM)

- Held 14 training exercises, including Tiger Stadium Emergency Response Training, Campus Communicators Active Shooter Training, and the School Safety Summit.
- Collaborated with the office of Mayor-President Sharon Weston Broome, Baton Rouge Police Department, East Baton Rouge School System, LSU Athletics, and LSU Risk Management to host nearly 1,500 participants at training exercises.
Enterprise Architecture

Business Intelligence (BI)

Tableau

- Provided data visualization support for ITS Funding Project, Data Architecture Timesheets Pilot, and Monthly CTO Dashboard data extracts.
- Provided user community support in the development of administrative and sports-related visuals for Athletics and project progression summaries for the PMO.
- Provided support for Tableau Administration by reconfiguring hardware for future ease of expansion, developing the Tableau Desktop Information Kit, implementing a live server performance monitoring tool, and managing licenses for volume discounts.
- Provided support for Tableau Server by upgrading to 2018.3, testing 2019.1, branding Tableau Server to LSU, configuring Tableau Server to communicate with LSU Traffic Manager and internet requests, and implementing SSO SAML authentication.

ETL, Data Warehouse, and Data Lake

- Prepared environment and established processes for migrating mainframe data sets.
- Advanced Workday integration by converting personnel data mart from mainframe to Workday and re-engineering mapping of worktags to data mart structure.

Enterprise Data Repository Project (EDRP)

- Chartered the Data Governance Working Group.
- Collaborated with Institutional Research and University Registrar to begin data catalog reporting.
- Conducted initial stakeholder meetings to gather needs related to streamlining data access and related processes with academic units, Communication Across the Curriculum (CxC), Enrollment Management, Institutional Effectiveness, Institutional Research, Registrar, and Student Success.

Workday Reporting and Administration

- Maintained and enhanced critical reports for LSU Athletics, Board of Regents, and enterprise financial revenue and expense needs.

Legacy Reporting

- Completed project to quantify data for Directory system.
- Began Beacon integration update.
Central Unit Support (CUS)

- Implemented Workday 31 and 32 updates.
- Enhanced Workday Business Processes and functionality by redesigning monitoring reports, processes, alerts, branding, and configurations.
- Increased data accessibility with new HR Analyst, Academic, and Timekeeper dashboards.
- Implemented user-specific reporting enhancements including Family and Medical Leave Act (FMLA) reports that track employees on leave and business asset reports that help streamline property management processes.
- Implemented CashNet for several campus departments.
- Implemented Concord for Procurement Office, centralizing University contracts.

Legacy Support (LS)

- Ensured Financial Aid 19 adhered to Federal Government changes to packaging and reimbursement.
- Completed 70% of replication of mainframe databases to non-mainframe environments.
- Decommissioned Residential Life and University Stores Management legacy applications.
- Integrated Slate with mainframe student systems, thereby allowing applicants to apply to LSU Online undergraduate and graduate programs.
- Integrated LSU Online data with SalesForce Customer Relationship Management solution.
- Implemented T2 as a replacement for the current legacy traffic system.

Production Support (PS)

Database Administration

- Administered database changes by upgrading and economizing database servers in addition to reclaiming and upgrading SQL server licenses.
- Implemented RedGate to improve Windows database monitoring and efficiency.
- Implemented Venyu for disaster recovery to improve database availability.

Enterprise Integrations

- Improved integration efficiency by implementing a new integration software solution.
- Assisted LSU Online with migration of integrations from GeauxPoint.
- Completed integrations of Blue eXplorance, Cherwell, Title IX, and Slate in addition to Phase 1 of InfoEd and three parts of Faculty 360.

Change Management

- Designed and implemented a new change management process for all central IT updates.
- Implemented a work intake process for all central IT work requests.

Production Support Development

- Migrated Faculty sites to Omni and Footprints and ServiceNow to Cherwell.
- Upgraded Grok, TigerWare, and Training.lsu.edu to Bootstrap 4 and Panopto, the lecture capture service, from 5.3 to 6.0.
- Completed WCAG 2.0 AA accessibility upgrade for MyLSU portal.
University Networking and Infrastructure (UNI)

Network Applications and Server Administration

- Deployed BOX, Microsoft Teams, Microsoft ATP, and Conditional Access.
- Upgraded BlueCat IPAM system and VM/Datacenter storage.
- Replaced Fiber Channel Devices (MDS) and existing Microsoft Licensing and Provisioning Method.
- Converted Microsoft licenses to A5.
- Migrated authentication method for Office365 and Azure AD from a separate system to a system synced with the local active directory.

Network Engineering and Architecture (NEA)

- Built network connectivity to Azure resources.
- Deployed six new department firewall and VPN devices.
- Began deployment of replacement core switch and routers.

Wireless Networking

- Redesigned University Lab School wireless network.
- Designed wireless networks for the Stephenson Veterinary Clinic and the Greenhouse District.

Technical Architecture and Network Construction (TANC)

- Completed nearly 1,000 renovation, installation, and other architectural work orders for locations including the Veterinary Medicine wireless environment; Tiger Stadium, PMAC, and Alex Box Stadium; and Evangeline and Cedar Hall, Nicholson Gateway Development.
Service Desk (SD)

- Invested in public outreach by installing a new furniture layout in Frey location.
- Invested in analyst productivity by implementing use of headsets and a new callboard to track live call statistics.
- Supported ITSP in conducting campus-wide Cyber Security Awareness campaign in October.
- Increased customer traffic from neighboring institutions, such as Baton Rouge Community College, Southern University at Baton Rouge, and Mississippi State University, through demonstrated quality and customer service success.

Field Consulting (FC)

- Initialized Field Consulting services which provide technical support support to those departments without in-house staff.
- Utilized IT support to complete a multitude of projects, including an upgrade of all CSS computers to Windows 10, and the beginning of imaging and replacing i112 desktops in Himes testing lab.
- Contracted 3,160 hours of IT support, including lifecycle upgrades, hardware relocations and replacements, and server migrations, with multiple campus departments such as LSUPD, LSU Parking, Humanities and Social Sciences, the PMO, and Digital and Continuing Education.

Portfolio Management Office (PMO)

- Standardized project status delivery methods.
- Broadened involvement with more campus departments.
- Collaborated with campus partners - such as Office of Emergency Management; Strategic Communications; the Offices of Internal Audit, Human Resource Management, and Title IX and Sexual Misconduct; and IT Security and Policy, Network Applications, and System Architecture teams - on 15 completed projects including implementing the Single Calendar Solution project; implementing the enhanced Campus Map project; improving Case Management and Anonymous Reporting capabilities; and conducting Microsoft Office365 Account Synchronization.

Business Process Management (BPM)

- Collaborated with Facility Services, English Language Orientation Program (ELOP), Student Success, and Strategic Communications to improve business processes.

Service Architecture (SA)

- Installed new state of the art fire suppression system in Frey Data Center.
- Added additional power capacity behind both Uninterruptible Power Supplies (UPSs) in the Frey Data Center.
Talent Management (TM)

- Collaborated with HR to assess and improve career progression framework and process.
- Began developing definitions, compensation, and guidelines for career progression levels.

Financial Management (FM)

- Saved the Student Health Center $19,684.70 on 35 Dell computers.
- Saved the University $2,499.70 on Moodle licensing.
- Saved LSU Geology and Geophysics $15,996.24 on eight machines which allowed for an update to the entire lab and purchase of 11 computers.
LOOKING AHEAD TO FY20
ITS leadership will guide the department into FY20 with the goal of building upon the progress made in the past year. Supporting LSU IT in alignment with LSU Strategic Plan 2025 remains the primary mission, implemented through the development and integration of innovative IT solutions, best practices, and principles amongst all applicable areas of the University using input from the ITGC, campus stakeholders, and industry expertise.

**ESTABLISHING THE FOUNDATION FOR A MODERN IT COMMUNITY**

Two years ago, the CTO developed a plan that would comprehensively transform the existing LSU IT landscape into one that would standardize systematic adaptation to advances in technology, academia, and University needs through strategic efforts which focused on faculty and research support, mainframe mitigation, modernization of the IT infrastructure, and cloud hybridization. Implementation of this plan began with designing an equally responsive framework that could inform the operations and business processes used in tandem with innovations within the enterprise IT system.

In the coming year, we will continue to strive for progress in these areas. The FTC, Service Desk, and RETS teams will receive investment and support to refine and advance planned and existing initiatives. ITS teams that support the Mainframe will assess operations and support for outsourcing opportunities and applications and systems for outsourcing and re-platforming opportunities. Modernization efforts will include reassessing opportunities for a Student Systems solution, developing virtual security and compliance prospects, planning and implementing system and infrastructure upgrades and enhancements, and maturing existing and designing future data architecture. We will also continue working towards a future resource and service configuration consisting of both cloud-based and on-premises virtual infrastructures.

**PROMOTING OPEN, ACCESSIBLE, AND CENTRALIZED IT**

Architecting an IT environment responsive to LSU community expectations requires both feedback from campus stakeholders on existing and necessitated services and the coalescing of resources, standards, and services across all entities throughout the multi-institutional network. ITS has gained traction in making this a reality, especially with the maturation of the Enterprise Data Repository, intended to standardize multi-institutional data management, and the CIO Alliance, charged with unifying expectations for institutional IT products, services, and resource management. Upcoming efforts to support this future state include developing frameworks for shared service and data management and improving communications channels to and from the campus community.

ITS intends to make progress in these areas through cross-departmental collaborations, dialogue, and actions. The CIO Alliance will continue to exchange information and cultivate shared IT solutions. Services such as the IT Field Consulting service, created to supplement IT field support across campus, and the Shared Services Cadre, conceived to supplement skilled staff who address upgrades, demand surges, and service or security incidents, will be further refined to better serve LSU community needs. ITS will develop a communications plan to increase campus community knowledge of IT services and projects and cyber security impacts on the LSU IT network as well as formulate a centrally coordinated, distributed Workday support model. To provide high level assistance, the ITGC will intensify efforts to inform and educate key stakeholders on technology opportunities, risks, and solutions.
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SERVICE AND OPERATIONS:
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Katie Bouey, Director, Portfolio Management Office
Adam Clary, Director, Service Desk
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Terry Doub, Director, Service Architecture

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Mike Smith, Director, Production Support
Byron Honoré, Director, Legacy Support
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