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EXECUTIVE OVERVIEW

The University wrapped up its efforts on the 2012-15 University Plan for IT during the early fall 2015. The 2012-15 Plan was largely an additive one; numerous new initiatives were identified, and more than $3 million in new one-time funding was provided for new resources. Roughly $1 million a year of additional one-time funding was allocated for the completion of that Plan.

This new three-year plan provides a University-generated “roadmap” for the Information Technology Services (ITS) department to implement and deliver services that are consistent with customer-identified needs, support University strategic plans, and are mindful of available resources. Given the substantial amount of time required to develop such a plan, and given that we are mostly through the 2015-16 academic year, this plan is for 2016-19.

This plan consists of organizational strategies, strategic areas of focus, specific initiatives, staffing recommendations, and budgetary needs to complete the plan. These items were developed through an extensive collaborative process with the University community. In addition to community feedback, ITS engaged consulting services for a portion of the plan. We also referred to the Strategic Enrollment Plan to include technology initiatives and strategies that support student recruitment, enrollment, and retention. The goal of this collaborative process was to create a shared vision for a three-year information technology roadmap at Ferris State that is consistent with identified needs, the University’s strategic plans, and available resources. Following this comprehensive and collaborative process, considerable time was spent re-envisioning the highest information technology priorities for the institution, and the deployment of our available resources for this Plan.

There are several significant new strategies outlined in this plan along with continuing the most important strategies from the previous plan. One of the organizational strategies is to review the IT department functions and services in order to take intentional steps to appropriately reduce our service portfolio to realign some of our existing resources to support this 2016-19 University Plan for IT. Another important strategy is to improve the IT governance process for the addition of new services and/or applications. The governance process will prioritize and manage requests for new application software and improve collaboration across units, colleges and divisions.

We are very grateful for the engagement of members of the University community on this plan and are pleased that a significant amount of that input has helped shape this new University Plan for IT.
INTRODUCTION

Ferris State University is proud of its tradition of providing state-of-the-art academic programs and facilities, and its commitment to maintaining a robust information technology systems foundation that can support its educational mission. The University’s vision of being a recognized leader in integrative education, where theory meets practice throughout the curriculum and providing a stimulating, student-centered academic environment, depends in part on information technology systems and services that are responsive to customer needs and focus on enhancing student success. In addition to supporting academic success, ITS must support and advance the business operations needs of the University. We have created a plan that includes strategies and initiatives that will position ITS to help our customers with improving day-to-day operations.

INFORMATION TECHNOLOGY STRATEGIES

In order to effectively implement recommendations in this Plan, maintain customer satisfaction, and address stakeholder concerns, this Plan includes several significant new strategies, along with continuing the most important strategies from the previous Plan. These strategies focus our services on the most important needs for the University.

New Strategies

• Implement supported recommendations from the Review of ITS department functions and services report. These recommendations will take intentional steps to reduce our service portfolio where appropriate, and/or adjust how we deliver some services, to realign some of our existing resources to leverage them behind this University Plan for IT and support customer service.

• Develop mobile application strategy and develop a team of two continuing positions and two student employees dedicated to advancing the University’s desire for more mobile app functionality for students.

• A topic senior leaders from across the University shared with us is that we do a good job of implementing new applications and systems, but before the new system matures and they are able to take advantage of the fuller functionality offered by the new system, the IT staff has to move on to the next implementation. Given our desire to help users in this area, and to have fewer applications over time, we are realigning two positions from the Enterprise Application area to be part of three new Business Analyst and Process Automation positions, with one focused on academic applications, one focused on Administration and Finance applications, and the third one focused on any university application.

• The University has licensed hundreds of desktop, departmental and University-wide applications that require various levels of IT administration and support in the field. A concerted effort is needed to inventory all these software applications to document licensing, ownership, and use of applications. This effort is a prerequisite to discuss and make decisions regarding the future disposition of applications with customers to intentionally reduce the number of support applications at the University and supported by IT. Our goal is to reduce the number of supported applications which will allow ITS staff to focus on fewer applications and provide improved service. This process will need to occur over time as part of the IT Governance process for adding new applications.
• Develop and implement IT governance process to consider requests for new applications at the University. This governance process will evaluate requests for new applications from a priority perspective, and ensure that we have communication across divisions to reduce duplication of effort and tools, and reduce the number of applications over time. This will help enable our ITS staff to focus on the most important priorities for the institution.

• Support the Strategic Enrollment Plan by including their top IT initiatives and strategies for improving student recruitment, enrollment, and retention.

• During the life of this Plan, we will create an institutional philosophy statement regarding the use of the cloud.

Continuing Strategies

• Continue the academic alignment by maintaining the assignment of ITS desktop support technicians in customer locations to provide focused support within the academic colleges. While each technician will normally be responsible for multiple buildings, the intent is to strengthen the connections between the colleges and ITS, enabling the ITS technicians to learn the specific technology for that college, and to use that knowledge to better meet customer needs.

• Project management efficiency continues to be important for the University and ITS because of the limited resources and a desire to move more quickly on initiatives. In a continued effort to improve ITS project management practices ITS will review and revise our project selection, planning, and support processes. ITS will identify up to 6 staff members with the best project management skills as project leads and provide skills based training for project management. The benefits of this effort will be improved communications, customer satisfaction, and quality of completed projects.

• Continue to improve ITS communications with customers. ITS utilizes multiple channels of communication to let our customers know about upgrades and maintenance, new applications, problems, changes in services, emergency messaging, security alerts, and more.

AREAS OF FOCUS FOR THE UNIVERSITY PLAN FOR IT

The areas of focus represent the major strategies and initiatives developed after significant input from the University community from open forums, surveys, focus groups, SPARC, ITS staff, and ITS management. The following areas of focus organize the many initiatives and strategies in this Plan.

1. Teaching and Learning
2. Customer Service
3. Academic and Administrative Applications
4. Information Technology Infrastructure
5. Mobile Access Strategy
6. Information Security
7. Research
## 1. Teaching and Learning

Academic focus groups and survey respondents identified the reliability of teaching technologies in classrooms, computer labs, and online learning applications as an area for improvement. Improving teaching and learning technologies will enhance instructional quality/time in classrooms and labs, quality of mixed delivery and fully on-line programs, the image of the University, and, most importantly, student success.

<table>
<thead>
<tr>
<th>REF #</th>
<th>Initiative</th>
<th>Description, Objectives, Actions</th>
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</table>
| 1.1   | Develop and Implement a Classroom Technology Enhancement Strategy for All Sites | • Requires strong collaboration with faculty, academic leadership, Physical Plant, and ITS to develop the strategy, identify classrooms, and resources  
  • Potential strategy may include multiple approaches: all classrooms the same, tiers, basic and advanced, etc.  
  • Assess the current portfolio of technology-equipped classroom for consideration  
  • Develop replacement criteria based on classroom usage, equipment age, support issues, program specific needs, etc.  
  • Create annual list of classrooms for upgrade consideration  
  • Number of classrooms to be upgraded annually will be determined by resources available from Academic Affairs.  
  • Upgrade classroom technology equipment based on criteria and available resources |
| 1.2   | Expand Classroom Readiness Checks | • Expand efforts to include periodically checking classroom throughout the semester  
  • Work with Academic Affairs to develop a work study program to utilize students for this effort  
  • Program will identify the number of additional student technicians and funding  
  • The program can be used to reduce student debt and as a recruiting tool for colleges with technology-specific programs  
  • Kendall will plan for a similar initiative in the future |
| 1.3   | Develop and Implement an Academic Computer Lab Strategy for All Sites | • Requires strong collaboration with faculty, academic leadership, and ITS to develop the strategy, identify computer labs, and resources to develop strategies  
  • Evaluate the current portfolio and develop criteria to replace, expand, or discontinue specific computer labs  
  • Develop replacement criteria based on lab utilization, equipment age, support issues, program specific needs, etc.  
  • Implement strategy to replace, expand, or discontinue computer labs |
| 1.4   | Kendall will Develop a Computer Replacement Programs | • Requires strong collaboration with Kendall leadership, faculty, and technical staff to develop the program  
  • Complete inventory of existing equipment and develop criteria, parameters, schedule, etc.  
  • Communicate the replacement program criteria to faculty and staff  
  • Implement new replacement program as defined  
  • Student program, evaluate moving from a four-year to a two-year lease program |
| 1.5   | Assist Academic Affairs with development an online learning road map | • Collaborate with Extended and International Operations to develop an online learning road map with strong input from Academic Affairs, faculty, Faculty Center for Teaching and Learning, Learning Technologies Board, and eLearning Management Advisory Team to plan for new features and technologies becoming available over the next 3-5 years  
  • Evaluate new and existing lecture capturing technologies to determine which systems provide the best features to meet faculty and student needs. The current system is Tegrity  
  • Evaluate synchronous collaboration learning tools such as Blackboard Collaborate  
  • Continue to improve accessibility through established support process and services such as closed caption or other services  
  • Evaluate planned student validation methodology and capabilities for on-line learners to determine viability and/or identify other solutions  
  • Evaluate learning analytics software for capturing and measuring data such as student success, early warnings, retention, and other key indicators to success to improve our services  
  • Continue 24/7 phone support services for on-line learners, students, faculty, and staff  
  • Plan for software and hardware upgrades to address capacity needs and to support emerging technologies |
2. Customer Service

Administration and Finance is a service division committed to delivering customer-oriented, cost-effective, quality services for students, faculty, staff, and visitors. ITS strives to support the divisional vision of providing outstanding customer service to students, faculty and staff, who are increasingly reliant on technology in their daily lives. By providing quality and timely customer service, our customers are better informed, more knowledgeable, and more productive in their jobs through the use of technologies. The following customer service strategies and initiatives were developed from the A&F Strategic Plan and Vision, the highest value initiatives in the previous plan, and customer feedback.

<table>
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<tr>
<th>REF #</th>
<th>Initiative</th>
<th>Description, Objectives, Actions</th>
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<tbody>
<tr>
<td>2.1</td>
<td>Implement supported recommendations from review of ITS functions and services</td>
<td>• Review IT functions and services to identify services to discontinue or deemphasize and realign the resources to this plan</td>
</tr>
<tr>
<td>2.2</td>
<td>Continue Academic Alignment Strategy</td>
<td>• Computer technicians are assigned to customer locations, providing focused support within the academic colleges • Review current strategy for ways to improve service and deployment of staff • Academic alignment strategies are directly related to staffing and student funding in the new plan</td>
</tr>
<tr>
<td>2.3</td>
<td>Improve IT self-help environment and solutions for customers</td>
<td>• Identify commonly reported customer issues to be published as self-help knowledge articles • Increase the number of customer self-help solutions articles available via customer portal</td>
</tr>
<tr>
<td>2.4</td>
<td>IT staffing to support A&amp;F vision of outstanding customer service to students, faculty and staff</td>
<td>• Hire one full-time continuing network technician to support the complexity of our networking environment and to support ongoing network and wireless infrastructure upgrades • Reassign one existing IT employee as a full-time continuing computer technician to help deliver the desired level of customer service that meets the A&amp;F Vision of outstanding customer service • Continue additional student technicians from 2012-15 plan to deliver improved levels of customer service</td>
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<tr>
<td>2.5</td>
<td>Revisit the current IT Support Model for Satellite Campuses</td>
<td>• Requires strong collaboration with Kendall, EIO, and Pharmacy to build consensus on IT Support Model • Evaluate existing resources, services, and processes available such as ITS service desk, IT acquisitions, communications, automation and inventory • Update the model to reflect current environment and new strategies to support Kendall, EIO and Pharmacy campuses • New model will reflect the number of continuing ITS staff, student support, and appropriate reporting lines to support current needs</td>
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<tr>
<td>2.6</td>
<td>Strengthen relationships and manage expectations with customers through electronic and print communications, and engagement activities</td>
<td>• Improve communications on projects and rollouts via newsletters, IT communications site, and University Wide Notices • Continue IT Service Alerts for service outages with estimated time to recovery • Continue outreach to colleges and departments to improve communications on projects, new technologies, and topics of interest • Further promote Technology Services Portal for customer service</td>
</tr>
<tr>
<td>2.7</td>
<td>Improve internal ITS training program for ITS staff</td>
<td>• Skills specific training for ITS staff to improve resolution on issues, support of existing systems, and deployment of new services • Leverage online and group training opportunities to address common needs across IT Services departments including customer services topics • Provide project management skills based training to selected staff who will serve as project leads</td>
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<tr>
<td>2.8</td>
<td>Partner with Staff Center for Training and Development</td>
<td>• Further develop the partnership with the Staff Center for Training and Development to improve customer use of technology, training, and productivity tools • Work with the Faculty Center for Teaching and Learning and the Staff Center for Training and Development on efforts to improve training for Kendall, or alternatively, look at the resources needed to address Kendall training locally</td>
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</table>
3. Academic and Administrative Applications

Applications can be University wide or departmental systems that are used to support the business operations of the University. Our customers asked us to focus on efficiencies by leveraging existing technologies, keeping systems up-to-date, implementing additional software modules, and integrating systems where appropriate.

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<tr>
<th>REF #</th>
<th>Initiative</th>
<th>Description, Objectives, Actions</th>
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<tbody>
<tr>
<td>3.1</td>
<td>Develop applications roadmaps for University wide and departmental systems</td>
<td>• Develop applications roadmaps to implement the new features and technologies becoming available over the next three years for University-wide systems such as Banner and MyFSU. The departmental roadmaps will be developed for broadly used applications systems supported by IT Services&lt;br&gt;• Communicate and manage customer and IT expectations&lt;br&gt;• Establish schedules and align resources&lt;br&gt;• Plan for new Banner XE technology, application modules, and releases&lt;br&gt;• Implement modules we already own where appropriate&lt;br&gt;• Integrate departmental systems with Banner where appropriate&lt;br&gt;• Improve business continuity planning and preparedness&lt;br&gt;• Plan for hardware upgrades, hosting solutions to replace aging systems, and address capacity needs</td>
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<tr>
<td>3.2</td>
<td>Develop and deploy a software hosting strategy for University wide and departmental systems to include cloud hosting where appropriate</td>
<td>• ITS will develop a recommended University philosophy statement on the use of the cloud&lt;br&gt;• For University wide applications, evaluate vendor provided cloud or Software as a Service (SaaS) solutions for new University wide applications and major upgrades of existing systems prior to hosting internally&lt;br&gt;• For departmental applications, promote vendor provided cloud or Software as a Service (SaaS) solutions for new departmental application systems and major upgrades of existing systems over hosting internally when feasible&lt;br&gt;• Allow for improved scheduling, launch of applications, and version release management&lt;br&gt;• Allow ITS to focus on supporting the customer, application deployment, and integration when in the cloud</td>
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<td>3.3</td>
<td>Develop and transition to IT business process analyst services for customers to utilize University applications more effectively</td>
<td>• Utilize recommendations from professional services report on reviewing IT functions and services to guide the transition&lt;br&gt;• Analysts would focus on departmental efficiencies to improve internal or external services with departmental applications deployment, automation, workflow, upgrades, new modules, etc.&lt;br&gt;• Hire ITS Staff via open positions, and/or train existing staff, and make transition to new service</td>
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<tr>
<td>3.4</td>
<td>Develop and implement a governance process to approve or decline requests for new applications</td>
<td>• Establish relative priorities and timing for software purchases, implementation, upgrades, and other projects&lt;br&gt;• Review requests for new applications software to approve or deny for University use&lt;br&gt;• Review current applications software portfolio with a goal of reducing the number of support applications to allow staff to better support remaining applications, and to focus on other priorities&lt;br&gt;• Document a clear process for requesting a new application</td>
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<tr>
<td>3.5</td>
<td>Business Continuity and Disaster Recovery</td>
<td>• Collaborate with University officials on business continuity plans and priorities to identify the most important systems for inclusion&lt;br&gt;• Determine the type of offsite disaster recovery solution that best meets the needs of the University for the highest priority systems and within available resources&lt;br&gt;• Implement disaster recovery solution for the most important University-wide systems and applications. One-time funding for initial equipment and annual, ongoing maintenance will vary depending on cold, warm, or hot site solution.</td>
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<td>3.6</td>
<td>Investigate Reporting and Analytics Solutions</td>
<td>• Investigate cost effective options to substantially improve the ease of reporting for non-technical users&lt;br&gt;• Submit findings of potential solutions, cost, and recommendations for consideration</td>
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<tr>
<td>3.7</td>
<td>Assist University with evaluating University Electronic Information Technology (EIT) Portfolio for Accessibility</td>
<td>• Requires strong collaborate with application owners and vendors to complete an accessibility audit of applications&lt;br&gt;• Develop a applications accessibility compliance profile against University and industry defined accessibility standards&lt;br&gt;• Create a prioritized roadmap to improve University applications accessibility</td>
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</table>
4. Information Technology Infrastructure

The University is highly reliant on information technology to support teaching and learning and perform the day-to-day operations that run the University. Having a robust and reliable network infrastructure is essential in providing efficient access to internal and external resources used on a daily basis by students, faculty and staff. The following initiatives were identified through the planning process.

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<tr>
<th>REF #</th>
<th>Initiative</th>
<th>Description, Objectives, Actions</th>
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</table>
| 4.1   | Continue Wireless Initiative | • Establish annual budget to keep wireless infrastructure up to date for academic, residential, and administrative buildings  
• Address any residual capacity and/or coverage issues missed in the previous academic wireless initiative  
• Improve wireless deployment in administrative and athletic facilities  
• Consider a new fee for robust gaming or similar high bandwidth intensive uses in on-campus housing. |
| 4.2   | Kendall and other satellite campuses wireless managed by ITS | • Analyze wireless deployments for capacity and coverage for improvements  
• Improve wireless reliability and authentication in all Kendall buildings |
| 4.3   | Continue network infrastructure upgrades based on capacity and obsolescence of equipment, including all sites managed by ITS | • Establish annual budget to keep network infrastructure up to date for academic, administrative, and residential buildings  
• Address any residual issues in the previous academic initiative  
• Improve network infrastructure in administrative and athletic facilities  
• Consider a new fee for robust gaming or similar high bandwidth intensive uses in on-campus housing. |
| 4.4   | Perform Internet bandwidth upgrades based on utilization and capacity, including all sites managed by ITS | • In some cases, this includes network and security equipment upgrades |
| 4.5   | Investigate alternate Active Directory designs to improve customer experience and IT internal operational efficiencies | • Investigate cost effective options to improve the customer experience for authentication and use of applications  
• Investigate internal efficiencies that could be gained with a redesign of current Active Directory architecture  
• Submit findings of potential solutions, opportunities, costs, and recommendations for future consideration |

5. Mobile Access Strategy

The University currently does not have a mobile strategy for access to University applications. Implementing mobile access to frequently used applications will enhance the student experience and learning by providing improved access to these resources. The initial focus of a new mobile strategy will be to provide students with a mobile app to commonly used systems at the University.

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<th>REF #</th>
<th>Initiative</th>
<th>Description, Objectives, Actions</th>
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| 5.1   | Implement Mobile Apps for Students | • Implement mobile app(s) solutions that will allow students to access frequently used functions such as accessing grades, MyFSU, class schedules, online classes, registering for classes, paying bills  
• Hire two continuing employees to support mobile app deployment solution and development  
• Add two additional student employees to support mobile app focus  
• Ensure new web-based applications will support responsive design (mobile ready) for mobile device access |
6. Information Security

The Information Security team works with the campus community to safeguard the University’s information and technology infrastructure, enabling the University to comply with its institutional and compliance obligations for securing data. IT Services has an existing plan that includes multi-faceted strategies and initiatives to protect University information and systems from external and internal cyber-security related threats. The following bullets identify some of the current activities and new initiatives for information security:

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<th>REF #</th>
<th>Initiative</th>
<th>Description, Objectives, Actions</th>
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</table>
| 6.1   | Implement the remaining initiatives in the IT Security Plan | • Continue to develop an Information Security Program that includes, but is not limited to, governance via policies, awareness training, annual regulatory compliance testing, etc.  
• Deploy file and folder encryptions for departments who store confidential information  
• Expand encryption deployment to University owned laptops and tablets  
• Continue deployment of “Air Watch” on University owned phones and tablets in health care areas  
• Continue deployment of Web Application Firewall to protect public web facing systems based on access to confidential information  
• Complete annual risk assessments and penetration testing for PCI and HIPAA regulatory compliance |
| 6.2   | Complete a feasibility study of “Banner Data Defense” to include a cost benefit analysis and plan for implementing. This product provides features such as encryption and auditing of Banner data | • Evaluate the Ellucian Banner Data Defense and Oracle’s database encryption solutions  
• Evaluate current infrastructure to determine if upgrades are required  
• Complete cost analysis for both solutions  
• Select solution that best meets the University needs  
• Complete contract negotiations, develop a project plan and implement solution |
| 6.3   | Evaluate and implement Security Information Event Management (SIEM) tool | • SIEM provides a holistic view for security events such as log management, network visibility, and event detection/response capabilities for University owned systems, and to addresses compliance requirements for HIPAA, PCI, and FERPA  
• Define scope, objectives, criteria and use cases for solution  
• Investigate vendors that meet solution criteria  
• Create a short list of vendors for bidding  
• Evaluate and select solution that best meets University needs  
• Complete contract negotiations, develop a project plan and implement solution |
| 6.4   | Evaluate and select antivirus and malware solution and address device licensing deficit due to growth in computing devices at the University | • Protecting University owned assets from malicious activity such as viruses, spyware, and ransomware  
• Define scope, objectives, criteria and use cases for solution  
• Investigate vendors that meet solution criteria  
• Create a short list of vendors for bidding  
• Evaluate and select solution that best meets University needs  
• Complete contract negotiations, develop a project plan and implement solution |

7. Research

Over the past couple of years, there has been an increase in requests for academic research support, particularly in the health sciences areas. The feedback from focus groups and surveys indicates this trend will continue and there is a need to support these scholarly activities.

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<th>REF #</th>
<th>Initiative</th>
<th>Description, Objectives, Actions</th>
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| 7.1   | Develop an IT research support model for the increasing academic research needs | • Requires strong collaboration with faculty, college leadership, and IT Services to provide infrastructure, processes, and human resources to support research effectively  
• Support for academic research will likely be for specialized software that could affect ITS technicians, analyst, and security work loads |
PRIORITIZATION AND FUNDING OF INITIATIVES

Ferris State University defines its priorities beginning with its students and academic needs for teaching and learning as our top priorities. As stakeholders defined IT needs, several key areas of focus surfaced, including teaching and learning, customer service, technology infrastructure, and mobile access for students. Priority levels were established based on immediacy of need, stakeholder-defined value to the University, President’s Council priorities for IT, and resources available to implement initiatives.

The priority column in the table below reflects the result of stakeholder inputs and University leadership decisions for IT priorities over the next three years. The initiatives with a “High” priority rating are considered critical to the University's IT needs. These initiatives identify a level of service, strategy, or product that provides the highest value to customers and affects the most stakeholders.

The initiatives with “Medium” priority level are considered essential to the University’s IT needs. These initiatives are responsive to concerns identified by customers, focus groups, and University leadership to improve existing and/or new IT services and strategies. While these initiatives are essential to the success of the University Plan for IT, in most cases they are not as time-sensitive.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Ref #</th>
<th>Strategies &amp; Initiatives</th>
<th>Description, Objectives, Actions</th>
<th>Base Funding</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
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</table>
| H        | 1.1   | Classroom Technology Enhancement Strategy for All Sites | • ITS, Academic Affairs, Basic Technology Upgrade Cost Only @ $25K/Rm for 10 rooms  
• ITS, Kendall, Basic Technology Upgrade Cost Only @ $25K/Rm for 2 rooms | 250,000 | 250,000 | 250,000 | 250,000 | 50,000 | 50,000 |
| H        | 1.3   | Academic Computer Lab Strategy for All Sites | • Requires strong collaboration with Academic Affairs to develop the strategy  
• Kendall will develop the strategy | Planning Yr | Planning Yr | Planning Yr | Planning Yr | TBD | TBD |
| H        | 2.2   | Continue Academic Alignment Strategy | Continue assignment of ITS desktop support technicians in customer locations to provide focused support within the academic colleges | | | | | |
| H        | 2.4   | IT Staffing to Support A&F Vision of Outstanding Customer Service | • ITS, A&F, 2 FTE, Salary & Benefits (? On Funding current GF only)  
• Temporary Staff for FY16, 4 Temp Computer Techs  
• 10 Additional Student Workers | 67,000 | 132,000 | 67,000 | 67,000 | |
| H        | 4.1   | Continue Wireless Initiative | • To keep wireless infrastructure up to date in academic and administrative buildings.  
• To keep wireless infrastructure up to date in residential buildings. | 75,000 | 75,000 | 50,000 | 50,000 | TBD | |
| H        | 4.3   | Continue Network Infrastructure Upgrades | To keep network infrastructure up to date for academic, residential, and administrative buildings | 50,000 | 100,000 | 50,000 | 100,000 | |
| H        | 5.1   | Implement Mobile Apps for Students | • Implement mobile app(s) solutions for students to access frequently used services, purchased application costs  
• Mobile Applications Specialists 2 FTE  
• Salary & Benefits $ 148,000  
• Funding for student support of Mobile Apps | 50,000 | 25,000 | 14,000 | 14,000 | |
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<tr>
<th>Priority</th>
<th>Ref #</th>
<th>Strategies &amp; Initiatives</th>
<th>Description, Objectives, Actions</th>
<th>Base Funding</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
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<tbody>
<tr>
<td>H</td>
<td>6.1</td>
<td>Implement Remaining Initiatives in the IT Security Plan and Continue Existing Regulatory Compliance Efforts</td>
<td>Continue to develop an Information Security Program that includes but is not limited to governance via policies, awareness training, annual regulatory compliance testing, etc. See 6.1 for list, internally funded</td>
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<tr>
<td>H</td>
<td>6.4</td>
<td>Evaluate current antivirus and malware solutions</td>
<td>Protecting University owned assets from viruses, spyware, and ransomware. Cost for Software license to cover growth in University computing devices, internally funded</td>
<td></td>
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<tr>
<td>M</td>
<td>1.4</td>
<td>Computer Replacement Programs for Kendall</td>
<td>Kendall computer replacement programs</td>
<td>57,000</td>
<td>8,000</td>
<td>25,000</td>
<td>25,000</td>
<td>25,000</td>
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</table>
| M        | 1.5   | Assist Academic Affairs with developing an online learning road map                       | • 24x7 Help Desk Phone Support, Nights, Weekends, and Holidays  
• Synchronous Learning Strategy and Solutions Cost for Blackboard Collaborate Software  
• ADA compliance cost, online student ID validation | Planning Yr |      |      |      |      |
|          | 2.1   | Implement Supported Recommendations from IT Functions and Services Review                 | Review IT functions and services to identify services to discontinue or deemphasize and realign resources         | 38,730        |      |      |      |      |
| M        | 2.5   | Revisit IT Support Model for Satellite Campuses                                           | Requires strong collaboration with Kendall, EIO, and Pharmacy to build consensus on IT Support Model |               |      |      |      |      |
| M        | 2.7   | Improve Internal IT Training for Staff                                                     | Skills specific training for ITS staff to improve customer service, internal funding                                |               |      |      |      |      |
| M        | 3.1   | Applications Roadmaps for University wide and Departmental Systems                        | • Estimated cost for Banner XE Professional Service only to upgrade Banner to the XE release  
• Hardware to support new Banner environment  
• Cost for other major applications | 12,000 | 100,000 | 100,000 |      |      |
| M        | 3.4   | Develop and implement a governance process to approve or decline requests for new applications | IT governance process for adding new applications at the University. This will also include doing an inventory of current applications, and eliminating some applications that are no longer needed |               |      |      |      |      |
| M        | 4.2   | Kendall and Satellite Campuses Wireless                                                    | Improve Kendall wireless deployment and authentication for all buildings                                                 | TBD           |      |      |      |      |
| M        | 4.4   | Perform Internet Bandwidth Upgrades as Needed                                             | FY17 EIO, FY18 Pharmacy, and FY19 Kendall                                                                                   | 40,000 | 25,000 | 60,000 |      |      |
| M        | 6.3   | Evaluate Security Information Event Management (SIEM) Tool                                | Tool for security events such as log management, network visibility, event detection/response capabilities for University owned systems |               |      |      |      | 117,000|
| H        | 3.3   | Transition to an IT Business Process Improvement Service Model                            | Hire two Business Analyst and reassign one existing staff member to focus on departmental efficiencies to improve applications deployment, automation and workflow | Salary and Benefits | $ 316,060 |      |      |      |

Note: All costs are estimates for assisting with financial commitments and prioritization. An empty cell in the cost column indicates no additional funding required at this time.
<table>
<thead>
<tr>
<th>Priority</th>
<th>Ref #</th>
<th>Strategies &amp; Initiatives</th>
<th>Description, Objectives, Actions</th>
<th>Collaboration</th>
<th>Base Funding</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>3.2</td>
<td>Software Hosting Strategies</td>
<td>Develop and deploy a software hosting strategy for University wide and departmental systems</td>
<td></td>
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<tr>
<td>M</td>
<td>3.6</td>
<td>Investigate Reporting and Analytics Solutions</td>
<td>Evaluate cost effective options to substantially improve the ease of reporting for non-technical users</td>
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<tr>
<td>H</td>
<td>3.7</td>
<td>Assist University with evaluating University EIT Portfolio for Accessibility</td>
<td>Complete an accessibility audit of applications to develop an accessibility compliance profile against University and industry defined accessibility standards and create a prioritized roadmap to improve applications accessibility</td>
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<tr>
<td>M</td>
<td>4.5</td>
<td>Investigate Active Directory design for improvements</td>
<td>Investigate cost effective options to improve customer experience and IT internal efficiencies</td>
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<td></td>
<td></td>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td>188,000</td>
<td>374,730</td>
<td>740,000</td>
<td>625,000</td>
<td>485,000</td>
</tr>
</tbody>
</table>

In addition to these highest priority initiatives, University stakeholders identified numerous IT initiatives as being important to the University's continuing success. They are not currently viable because of limited customer impact and/or lack of financial resources. These initiatives are prioritized as “Low” and remain in the plan for future consideration.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Ref #</th>
<th>Strategies &amp; Initiatives</th>
<th>Collaboration</th>
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<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>1.2</td>
<td>Expand Classroom Readiness Checks</td>
<td>Expand efforts to include periodically checking classroom throughout the semester</td>
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<tr>
<td>L</td>
<td>2.6</td>
<td>Strengthen IT relationships and manage expectations via communications</td>
<td>Improve communications on projects and rollouts via newsletters, IT communications site, and University Wide Notices</td>
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<tr>
<td>L</td>
<td>2.8</td>
<td>Partner with Staff Center for Training and Development</td>
<td>Partner with the Staff Center for Training and Development to improve customer use of technology, training, and productivity tools</td>
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<tr>
<td>M</td>
<td>3.5</td>
<td>Business Continuity and Disaster Recovery</td>
<td>• Estimated cost for hot site with high availability solution to all major applications and most departmental systems, monthly lease and one-time costs • Software cost for licensing • Network equipment and fiber optics</td>
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<tr>
<td>L</td>
<td>6.2</td>
<td>Feasibility Study of Banner Data Defense</td>
<td>Evaluate the Ellucian Banner Data Defense and Oracle's encryption solutions for Banner</td>
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<tr>
<td>L</td>
<td>7.1</td>
<td>Develop an IT Research Support Model</td>
<td>IT Support model for academic research needs</td>
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</table>
ANNUAL ASSESSMENT

An annual assessment will be completed in collaboration with the IT Advisory Council, stakeholders, and University leadership. The assessment will include outcomes from the current year’s initiatives and adjustments to the upcoming year planned initiatives and budgets.

In as much as possible, new initiatives outside the initial plan will be deferred to the annual assessment cycle for consideration in the following year’s priorities. All requests for adding new services and/or applications must go through the new IT Governance approval process when established. Requests for new initiatives will require vice presidential approval to be inserted during a current plan year.