February 24, 2009

MEMORANDUM

TO: UF Community

FROM: Chuck Frazier, Interim CIO and Chair of the IT Action Plan Task Force

RE: 2009 Information Technology Action Plan

I am very pleased to announce that President Machen has accepted the 2009 IT Action Plan. The full text of the report is posted on the following Web site www.it.ufl.edu/itactionplan. While approving the report on February 23, 2009, the President indicated that he is weighing implementation options and will decide upon a specific strategy in the next several weeks. Nothing identified for change in the report changes until a time to be determined as part of the implementation plan.

This is a very short note, but I would be remiss if I did not use it to personally extend my sincere thanks to members of the IT Steering Group, the IT Action Plan Task Force, multiple organized IT groups, and the many members of the UF community that contributed time, talent and heart to this process. I believe we got insightful and honest views from everyone who participated. I know we carefully considered the input, and the IT Action Plan is better for the combination.
February 2009

University of Florida

Information Technology Action Plan
2009 University of Florida
Information Technology Action Plan

Submitted to President J. Bernard Machen

by

The UF IT Steering Group and the UF IT Action Plan Task Force

IT Steering Group

Kyle Cavanaugh, Chair
Senior VP, Administration

Larry Arrington
Interim Senior VP, Agric. and Nat. Resources

Brian Beach
Interim Senior VP, Administration

Doug Barrett
Senior VP, Health Affairs

Frank Bova
Chair, Faculty Senate

Jimmy Cheek
Senior VP, Agric. and Nat. Resources

Joe Glover
Senior VP and Provost

Matt Fajack
VP and CFO

Win Phillips
VP, Research

Ed Poppell
VP, Business Affairs

Chuck Frazier, Ex-officio
Interim CIO and Professor Emeritus

IT Action Plan Task Force

Chuck Frazier, Chair
Interim CIO and Professor Emeritus

Mike Conlon
Associate CIO, Director of Data Infrastructure

Mike Corwin
Director, UF Bridges

Tim Fitzpatrick
Associate CIO, Dir. Network and Comp. Services

Joe Joyce
Exec. Assoc. VP and Prof., Agric. & Nat. Res.

Bernard Mair
Assoc. Dean of Info. Res. & Tech. Progs., CLAS

Mark Orazem
Professor, Chemical Engineering

Jan van der Aa
Asst. VP, Info. Services/CIO, Health Science Ctr.

Fedro Zazueta
Associate CIO, Prof. and Director of Acad. Tech.
# 2009 University of Florida Information Technology Action Plan

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td></td>
</tr>
<tr>
<td>1. UF IT Guiding Principles</td>
<td>1</td>
</tr>
<tr>
<td>3. UF IT Governance Structure Recommendations</td>
<td>9</td>
</tr>
<tr>
<td>4. UF IT Engagement Recommendations</td>
<td>14</td>
</tr>
<tr>
<td>5. UF IT Organizational Structure Recommendations</td>
<td>17</td>
</tr>
<tr>
<td>6. UF IT Core Funding Model Recommendations</td>
<td>20</td>
</tr>
<tr>
<td>7. UF IT Priority Projects</td>
<td>27</td>
</tr>
<tr>
<td>8. Addenda</td>
<td>28</td>
</tr>
</tbody>
</table>
President Machen announced at the beginning of the 2008-09 academic year that there would be a major focus on improving University of Florida’s information technology (IT). The first stages of the President’s initiative were to approve the appointment of an Interim CIO and to move the reporting of all central IT organizations to the Senior Vice President for Administration. Following the appointment of an Interim CIO, President Machen and the Senior Vice President for Administration jointly charged two groups with developing an action plan to integrate IT at UF to operate under a single CIO and build a firm basis for further development, in short, to create UF IT.

An action plan process was approved by President Machen in September of 2008. Subsequently, on October 6, 2008, the President empanelled and charged the IT Steering Group (ITSG). Composed of seven vice presidents and the President of the Faculty Senate, this group’s role was to give guidance and direction to the change process and to assure the action plan aligned with and facilitated UF’s mission. The second group, called the IT Action Plan (ITAP) Task Force, was empanelled by the Senior Vice President for Administration on October 6, 2008. Membership included eight IT managers and a faculty senate representative. The charge of ITAP was to work with the Steering Group to develop a comprehensive restructuring plan. The ITAP charge directed it to propose immediately actionable recommendations to enhance and improve UF IT. While UF IT is defined to include core IT units as well as distributed IT units, some recommendations (e.g., those included under funding and project priorities) refer exclusively to core IT.

There are eight sections to this report.

- Section 1 lists the guiding principles for the action plan process.
- Section 2 describes the Action Plan Process.
- Section 3 describes a new Governance Structure for UF IT. Section 4 outlines an Engagement Structure for the CIO office and UF IT.
- Section 5 provides a new Organizational Model for UF IT.
- Section 6 focuses exclusively on the Funding Structure of core IT. Distributed IT unit budgets and funding are not included in this report.
- Section 7 on Project Priorities outlines a small number of key projects we recommend for immediate action. There are many other important large and small IT projects not mentioned here. Some will be worked into ongoing operations, some are not immediately actionable, and some are ones that can be achieved through collaboration between core and distributed IT units.
- Section 8 identifies various resources and input considered by the ITAP. Included are (a) links to summations of engagement sessions with the UF community and formal recommendations by standing IT advisory committees, (b) memoranda appointing the two action plan groups, and (c) a summary list of UF core IT services.

**Main Recommendations On UF IT Governance Structure**
• Create a new IT Governance Structure for UF with the following four components:
  o Unit IT Advisory/Coordination Committees.
  o Topical Advisory Committees covering enterprise systems, academic technology, information security, and IT Infrastructure.
  o IT Policy Council.
  o IT Cabinet including at least seven vice presidents.
• The IT Policy Council and the IT Cabinet are new and not in the current IT advisory structure.

ON UF IT COMMUNITY ENGAGEMENT
• Create a UF IT Engagement Structure that identifies all stakeholder groups, defines categories of and interval for engagement activities, provides and utilizes metrics for assessing the effectiveness.
• Implement the UF IT Engagement Structure immediately upon acceptance of the recommendation.

ON UF IT ORGANIZATIONAL STRUCTURE
• Create a UF IT organization that integrates all IT at UF.
• Create a reporting structure under a single CIO in which the CIO directly manages all core IT services.
• Organize core IT units under four groups: Academic Technology (Core IT Services and Support), University/Enterprise Systems (Enterprise Applications), Computing and Networking Services (Core Infrastructure) and Information Security and Compliance.
• Expand University/Enterprise Systems to include ERP and Business Intelligence.
• Create a new Information Security and Compliance division made of existing units.
• Create a dual report structure for the lead IT professionals in four Senior Vice President areas (HSC, IFAS, Central Administration and E&G) in which these leads report both to the SVP in the area and the UF CIO. E&G does not currently have an area-wide IT lead. It is recommended that such a position be created and filled.

ON UF IT CORE FUNDING MODEL
• Total annual expenditures for IT services are $100M, split roughly 50-50 between core and distributed IT.
• Current revenue sources used to fund the "cost-to-continue" ongoing operations in core IT are not always recurring.
• Stabilize existing $14.2M as baseline funding for core IT ongoing operations.
• Provide $4M additional baseline funding to sponsor IT improvements and innovations.
• Locate responsibility to the proposed IT Cabinet for major IT projects and funding decisions.

ON UF IT PRIORITY PROJECTS
• The section includes a list of priority projects submitted for consideration of the IT Steering Group. It is not inclusive of all high priority projects, and it is recommended that consideration for final decisions go through the proposed IT Governance structure. These include:
  o Build a second off-site data center.
  o Improve support for instruction.
  o Improve support for enterprise systems.
  o Improve IT Security and Compliance.
President Machen announced at the beginning of the 2008-09 academic year that he was putting a major focus on improving University of Florida’s information technology (IT). The first stages of the President’s initiative included the appointment of an Interim CIO and a move of the reporting of all central IT organizations to the Senior Vice President for Administration. In September of 2008, an action plan process was approved.

Following the plan process, President Machen and the Senior Vice President for Administration jointly charged two groups with developing an action plan to integrate IT at UF to operate under a single CIO and build a firm basis for further development. The first group called the IT Steering Group (ITSG) was composed of seven vice presidents and the President of the Faculty Senate. This ITSG role was to give guidance and direction to the change process and to assure the action plan aligned with and facilitated UF’s mission. The second group, called the IT Action Plan (ITAP) Task Force, was empanelled by the Senior Vice President for Administration. The ITAP was composed of eight IT managers including the Interim CIO and a faculty senate representative. The charge of ITAP was to work with the Steering Group to develop a comprehensive restructuring plan and to propose immediately actionable recommendations to enhance and improve UF IT. While UF IT is defined to include core IT units as well as distributed IT units, some recommendations (e.g., those included under funding and project priorities) refer exclusively to core IT. Letters to the Steering Group and the Task Force are in the addendum.

1. UF IT GUIDING PRINCIPLES

IT principles describe the manner in which IT serves the University of Florida and that guided the ITAP Task Force during the Action Plan Process. The principles help inform decisions regarding resource allocation, applications, architecture and infrastructure. UF IT consists of all IT service providers of the University of Florida, regardless of reporting structure or funding mechanism.

- SUPPORT FOR MISSIONS. UF IT provides responsive IT services that enrich and enhance the university mission, supporting the University’s diverse activities.
- OPENNESS. UF IT operates in an open and transparent manner, providing complete information about services, costs, and performance and providing opportunities for participation by the UF community in decisions concerning IT.
- COORDINATION. UF IT operates in a coordinated, creative, and flexible manner, across IT service providers, organizations, and business partners, according to the UF IT principles expressed in this document and striking an appropriate balance between centralized and distributed provision of services.
- UBIQUITY. UF IT ensures access to UF IT services for the entire UF community.
- USABILITY. UF IT services are easy to use and appropriate for the activity.
- EFFICIENCY. UF IT is managed as an investment to provide services of value to the UF community.
- SUITABILITY. UF IT services are stable, sustainable, safe, and secure, complying with all related federal, state and university laws and regulations.
- POLICIES AND STANDARDS. UF IT develops, adopts, and manages policies and standards as needed to ensure ubiquity, usability, efficiency, and suitability.
- ACCOUNTABILITY. UF evaluates the quality of UF IT with the same rigor as it does the rest of its programs.
- CONTINUOUS IMPROVEMENT. UF IT continuously improves its services in a timely manner, innovating to better serve the UF community.
2. **ACTION PLAN PROCESS**

**PURPOSE**

The goal of this planning process was to produce actionable recommendations to **improve core IT services** at The University of Florida. The focus was on organizational consolidation, cost efficiency, performance measurement, priority setting, and sustainable funding. These recommendations are important, actionable and immediately implementable. Particularly addressing organizational issues in central IT sets the stage for the permanent CIO to lead UF IT.

Core IT services refers to services provided by the central organization and are used broadly by the University. These services include:

1. **Technology Infrastructure**—Telecommunications and Network infrastructure, Data Center Operations, Servers and Storage, Classroom Technology, etc.
2. **Enterprise Applications**—HR and Finance, Student Records, E-Learning, High Performance Computing, E-mail, etc.
3. **Support Services**—Help Desk, Instructional Support, Tutoring, Training, On-line Resources, etc.

**KEY PLAYERS AND ROLES**

**The President**

The UF President is the recipient of final recommendations.

**IT Steering Group**

Composed of Senior VPs and VPs, the committee provided guidance on the desired outcomes of this process. The Interim CIO served as an ex-officio member. This group will make the final recommendation to the President.

**IT Action Plan Task Force**

Composed of the major IT service providers across the University and faculty representation, this group provided a set of actionable recommendations that are immediately implementable. The recipient group of these recommendations is the IT Steering Group.

**IT Stakeholders Group**

Stakeholders include Colleges, Departments and Business Units (and other interested groups) whose performance and capacity for mission achievement are affected by core IT services. These groups provided input to the IT Action Plan Task Force that addressed core services improvements and needs. A strong effort was made to have broad representation and engage groups of stakeholders that represent the UF community.

**METHOD**

The proceedings of the committees are illustrated in Figure 1 and run on a timeline from left to right. The action plan process involved three stages:

1. **Goals, information acquisition and engagement** (October). Work started with a meeting between the steering and action plan groups to clarify purpose and set goals. This was followed by meetings with stakeholders with a focus on core IT services.
2. **Assessment, evaluation and recommendations** (October through January). During this stage the action plan group will meet regularly to assess, evaluate and produce actionable recommendations.

3. **Review and acceptance** (January-February). The steering and action plan groups met to review the proposed actions and make changes, improvements and additions. Final recommendations were made to the IT Steering Group for approval and submission to the President.

**COMMUNICATION**

To ensure UF community involvement several channels of communication were implemented. These included a website, wiki, regular reports on OIT newsletters, formal communications with standing committees, town hall meetings, and group discussions. Communication with the UF community was documented and integrated into the discussions of the Task Force (Addendum 1).
3. UF IT Governance Structure Recommendations

This section focuses on governance and its implementation components. The Task Force recognizes that well defined, formalized, and transparent processes receiving input from the correct stakeholders are needed. These processes must guide informed, collaborative and strategic decision-making by UF leadership. A decision making authority that is accountable must be established in combination with organizational and budgetary reorganizations. Main recommendations in this section include: (1) Integrate IT Councils into the governance structure and create them where needed, (2) recollect current topical advisory committees into four topical areas, (3) create an IT Policy Council between topical advisory committees and high level decision makers, and (4) create a new IT Cabinet aligned with senior leadership structure, thus incorporating central and distributed IT into a common governance structure.

Proposed IT Governance Structure

We propose a UF-wide IT Governance structure, shown in Figure 2, which includes the following components:

1. Unit IT Advisory/Coordination/Governance Committees to address local issues and provide representation to the Topical IT Advisory Committees.

2. Four main Topical IT Advisory Committees: Enterprise Systems, Academic Technology, Information Security, and Infrastructure. Each Topical IT Advisory Committee will provide representation to the IT Policy Council in such a manner that corresponding IT providers and IT users will be represented equally.

3. An IT Policy Council that assists and advises the UF-CIO regarding tactical and technology issues and decisions, establishes and oversees UF-Wide IT planning processes, and establishes and oversees UF-wide processes towards the development of reasonable and appropriate UF-wide policies, standards, major UF-wide strategic project and budget recommendations that are submitted to the IT Cabinet.

4. An IT Cabinet that approves UF-wide policies and standards, strategic UF-wide projects and associated budget, which requires a UF-wide financial commitment.

Unit IT Governance/Advisory/Coordination Committees

Each SVP area, DSO, College, Institute, or other functional unit is invited (but not required) to create a Unit IT Governance/Advisory/Coordinating Committee (Unit Governance). Representation should include IT professionals, faculty and staff members with IT interests, and students.

Composition

Inclusive but not limited to the following:

- IT professionals or IT providers.
- Unit Faculty.
- Unit Staff members.
- Unit Students as appropriate.
ROLE

- Address/Govern local Unit IT concerns.
- Establishing and overseeing Unit strategic/tactical planning processes.
- Assist in generating annual UF-Wide project proposals and sponsorship.
- Provide membership for the Topical IT Advisory Committees.

Note that the IT-Cabinet represents a function—not necessarily an independent physical entity.

MEETING FREQUENCY

As needed and determined by the Unit.

TOPICAL IT ADVISORY COMMITTEES

Four topical committees address the following areas: Academic Technology, Infrastructure, Enterprise Systems, and Security.

1 The UF Community includes Students, Staff, Faculty, Deans, VPs, Administration, DSOs, Friends and External Clients.
COMPOSITION
The composition of the Topical IT Advisory Committee will be drawn from the Unit IT Advisory/Coordination Committees, Inclusive of, but not limited to:

- Unit IT professionals.
- Unit IT Administrators.
- Faculty and Staff.
- Students as appropriate.

ROLE
The Topical IT Advisory Committees develop policy and standard recommendations. Membership shall include both IT providers and IT users. We recommend that the office of the UF CIO serves as ex officio non-voting member of each Topical IT Committee to provide continuity between the various committees.

In addition to addressing topical IT concerns, the Topical IT Advisory Committees would provide two members to serve on the IT Policy Council. One member shall be the chair of the Topical IT Advisory Committee. The other shall be selected so as to satisfy the requirement that the two representatives to the IT Policy Council shall consist of one IT provider and one IT user.

MEETING FREQUENCY
Monthly or as needed.

IT POLICY COUNCIL
The IT Policy Council is a joint faculty, staff, student, and IT provider community committee to assist the UF-CIO regarding integrated UF-wide tactical and technology issues and decisions. The IT Policy Council is responsible for establishing and overseeing UF-Wide IT planning processes, and developing and drafting UF-wide processes towards the development of reasonable and appropriate UF-wide policies, standards, and major UF-wide strategic project and institutional balanced budget recommendations that are submitted to the IT Cabinet through the UF-CIO.

COMPOSITION
Inclusive of, but not limited to:

- UF CIO (as ex officio member, Non-voting).
- One member appointed by each Senior Vice President.
- Two representatives appointed from each of the four Topical IT Advisory Committees: one representative should not be a member of the IT provider community nor IT administration.
- One member appointed by the Faculty Senate.
- One member from the APA assembly.
- One member from the Student Body.

ROLE
The IT Policy Council is responsible for:

- Assisting and advising the UF-CIO pertaining integrated UF-Wide tactical and technology issues and decisions.
- Establishing and overseeing the creation of integrated UF-Wide IT planning processes towards the creation of strategy, projects, and institutional balanced budget recommendations.
- Development and drafting of appropriate UF-wide policies and standards.
2009 University of Florida Information Technology Action Plan

- Creating the final prioritized recommendation to the IT-Cabinet of the IT project list and associated executive level sponsorship of UF-wide strategic IT initiatives with associated resource expenditures for approval.
- Recommend to the UF-CIO regarding operational technology projects.
- Coordination and oversight of the interests and initiatives of the Topical IT Advisory Committees.
- Creation, coordination and oversight of ad hoc committees to address specific issues not addressed by the Topical IT Topical IT Advisory Committees.

MEETING FREQUENCY
Bi-Monthly or as needed.

IT-CABINET
As the University of Florida administration already meets regularly to address university-wide policy and budgetary concerns, the concept of the IT-Cabinet, as presented here, may be considered to be a function, not necessarily an independent physical entity.

COMPOSITION
Inclusive of, but not limited to:

- Senior Vice President for Health Affairs;
- Senior Vice President for IFAS
- Senior Vice President for Administration
- Senior Vice President and Provost
- Vice President for Research
- Vice President for Business Affairs
- Vice President and Chief Financial Officer
- Vice President for Student Affairs
- Faculty Senate President or Designee
- UF-CIO

ROLE
The role of the IT-Cabinet is to review and decide on the outcome of the recommendations presented to the IT-Cabinet by the IT Policy Council through the UF-CIO.

Other IT Cabinet responsibilities include:

- Set Strategic Goals and Direction for UF-Wide IT.
- Provide oversight of the IT Policy Council.
- Oversee the creation and execution of UF-Wide IT strategic plan processes.
- Approve UF-wide IT Principles.
- Approve UF-wide IT Investment strategies.
- Approve UF-wide application needs.
- Approve UF-wide core project list.
- Provide input to other decision domains as desired or sought.

MEETING FREQUENCY
As needed.
THE OFFICE OF THE UF-CIO

The UF-CIO provides leadership of IT strategies, programs and organizations for the University of Florida. The UF-CIO, working out of the Office of the UF-CIO, guides the decision making processes through the IT Governance.

ROLE

The office of the UF-CIO oversees and manages IT Governance, including the planning processes. The CIO, as member of the IT-Cabinet, has authoritative involvement in campus IT decisions. In addition, the following responsibilities are included:

- Serves as the conduit between the IT-Cabinet and the IT-Policy Council.
- Channels UF-wide policy, standard, and investment recommendations of the IT Policy Council to the IT-Cabinet.
- Fosters constructive communication between the IT Governance layers and receives unresolved complaints.
- Engages the UF community and multiple constituencies in IT Governance.
- Ensures that the IT-Cabinet is able to function in its role as joint decision making authority regarding campus IT investments.
- Collaborates with pertinent other stakeholders, including the Faculty Senate, key business, academic, and IT leaders.

ADDITIONAL SUGGESTIONS

As IT Governance is about input, decision rights, and accountability, the Task Force recommends that all groups relying on IT within the UF community have the ability to participate in IT Governance, but we are particularly concerned about our students and faculty. We have proposed that faculty and staff are represented in the IT Governance structure. The entire UF community must have the ability to provide input that reaches all levels of the IT Governance structure through well established engagement mechanisms and processes. In addition, we offer two examples of what we envision can be done to ensure access by students and faculty:

Student Input. Student government could establish their own IT User/Advisory Committee which receives input and coordinates needs within student government. The seat on the IT Policy Council could be made available to the chair of the Student IT User/Advisory Committee. If there is an issue that cannot be resolved there or with the VP for Student Affairs, the issue could be brought to the IT Policy Council for consideration/resolution or directly to the CIO who could determine if it could be resolved by that office or should be referred to the Council.

Faculty Input. The Faculty Senate could establish their own IT User Committee (or use the existing Infrastructure Committee and the Faculty Senate Nominating Committee process) to align IT services and to resolve IT needs/issues to maximize the faculty’s contribution to UF’s missions: education, research and outreach. Similarly, the seat on the IT Policy Council could be filled by the chair of the Faculty IT User Committee. Faculty issues that cannot be resolved at the college IT User Committee could be brought to the IT Policy Council for consideration/resolution or directly to the CIO who could determine if it could be resolved by that office or should be referred to the Council.
4. UF IT ENGAGEMENT RECOMMENDATIONS

UF IT engagement focuses on IT service functions becoming sympathetically and productively involved with the UF community. The UF community includes all, students, staff, faculty and external stakeholders. Embedded in UF IT engagement is a commitment to sharing and reciprocity. The UF ITAP Task Force envisions partnerships, two-way communication and decision making to enrich the UF community experience and help improve outcomes.

UF IT engagement seeks to:

- Identify and respond to current and future needs of the UF community.
- Utilize UF community knowledge and expertise to work on solutions to common IT problems.

GUIDING PRINCIPLES

Guiding principles for UF IT engagement are:

1. Responsiveness: Listening to the UF community, asking the right questions followed by appropriate action.
2. Mutual Respect: Working with the UF community to encourage joint definition of problems and solutions.
3. Neutrality: Maintaining a role of neutral facilitator, provide sound information to governance and decision making bodies.
4. Communication: Ensuring UF community needs are understood and there is UF community awareness of available expertise and services.
5. Integration: Fostering integration of services to improve teaching, research, outreach, clinical and extension outcomes and create new opportunities.
6. Coordination: Ensure UF actions are implemented jointly, transparently and productively.
7. Resource partnerships: Committing to the time and effort that must be expended by the UF community for successful engagement.

PROCESS

Engagement is an on-going effort focusing on participation and communications via different channels. Through this process the UF community: 1) becomes aware and knowledgeable of services provided by core IT; 2) is informed about changes and operational issues; and 3) participates in the governance process. Engagement requires that specific targets and activities be defined and executed, followed by assessment and actionable recommendations to improve expected outcomes (Figure 3).

Figure 4 illustrates some of the major groups involved in engagement. Bullets are examples of the different stakeholders and not intended to be a complete list. Communications between the Executive group and the advisory structure is formalized and takes the form of official communications within the governance structure. Communications amongst the UF community may be less formal and include push and pull mechanisms as well as virtual or face to face social networking. Specific stakeholder contact activities are shown in Table 1.
Figure 3: The engagement process

Figure 4: Stakeholder group interaction
### Table 1

**POTENTIAL ACTIONS/ACTIVITIES TO SUPPORT UF IT ENGAGEMENT**

<table>
<thead>
<tr>
<th>Action (Activity)</th>
<th>Benefit</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Two-way communication through the governance</td>
<td>Provide a communication mechanism within a formal structure.</td>
<td>Continuous</td>
</tr>
<tr>
<td>structure</td>
<td></td>
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<tr>
<td>Breakfast with the CIO</td>
<td>Provide opportunity for any stakeholder to communicate with top IT</td>
<td>Monthly</td>
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<td>decision makers to address individual concerns.</td>
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<tr>
<td>Open Forum</td>
<td>Provide opportunity for communication and discussion of major issues.</td>
<td>Two to three times a year</td>
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<td>Newsletters</td>
<td>Maintain awareness of ongoing activities in IT. Mechanism</td>
<td>Current frequency varies depending on the</td>
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<td></td>
<td>delivering information to stakeholders. Currently three newsletters</td>
<td>newsletter</td>
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<td></td>
<td>are active.</td>
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<tr>
<td>Follow up to high visibility technical events</td>
<td>Host a discussion of practical UF opportunities the events provide.</td>
<td>Once a year (two if affordable)</td>
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<tr>
<td>Awards</td>
<td>Recognize important contributions to UF as they relate to IT. Makes IT</td>
<td>Once a year</td>
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<td></td>
<td>contributors visible to the UF community.</td>
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<td>CIO meetings with Colleges</td>
<td>Establish direct contact with colleges in a formal setting. Provide the</td>
<td>Rotate through colleges approximately every</td>
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<tr>
<td></td>
<td>opportunity for direct communication with the CIO.</td>
<td>month</td>
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<tr>
<td>Social Events</td>
<td>Put the email and the face together. Encourage camaraderie and a team</td>
<td>Based on holidays</td>
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<tr>
<td></td>
<td>environment.</td>
<td></td>
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<tr>
<td>Email</td>
<td>Provide engagement, governance and operational communication</td>
<td>Regularly as needed</td>
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<td></td>
<td>regarding services and proposed service and policy changes</td>
<td></td>
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<tr>
<td>Open House</td>
<td>Increase awareness of services provided by UF IT. Stakeholders</td>
<td>Every other year for select areas of UF IT</td>
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<td></td>
<td>communicate directly with staff providing services.</td>
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<tr>
<td>Faculty Showcase &amp; Tradeshow</td>
<td>Provide faculty with the opportunity to demonstrate achievements in</td>
<td>Every other year</td>
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<td></td>
<td>their expertise domain that are supported by IT. Provide an opportunity</td>
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<td></td>
<td>for faculty and staff to interact with external service providers and</td>
<td></td>
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<tr>
<td></td>
<td>vendors.</td>
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<tr>
<td>Web Site</td>
<td>Provide an external site containing official information on IT</td>
<td>Continuous</td>
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<td></td>
<td>Governance, organization, policies, plans, etc.</td>
<td></td>
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<tr>
<td>Wiki</td>
<td>Provide a location for continuous communication on issues related to IT</td>
<td>Continuous</td>
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<tr>
<td></td>
<td>in a collaborative fashion.</td>
<td></td>
</tr>
<tr>
<td>Technical staff meetings</td>
<td>Inform and seek input on technical issues.</td>
<td>As needed</td>
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5. UF IT ORGANIZATIONAL STRUCTURE RECOMMENDATIONS

PURPOSE

UF IT is a large collection of operations and organizations—some “core” or “central” or “institutional” and many “local” or “imbedded” or “distributed” in VP areas, colleges, departments, centers and institutes. It is important for UF to have a CIO establish policy and provide oversight for the provision of IT services university-wide, as well as lead directly an organization that supports coordinated provision of enterprise-wide services. The current IT organization at UF can be significantly improved to meet these objectives.

PRINCIPLES

1. Many services require coordinated execution between core and local providers\(^2\). Examples include major systems, email, IT security and identity management.

2. Specialized services should be provided locally. Examples include research systems, applications specific to local unit or program needs, and workstation support. However, where appropriate, several administrative units may be grouped to form a single “local” IT unit to achieve efficiencies and improved levels of service.

3. Large scale and/or common services should be provided centrally. Examples include ERP systems and networking.

4. All services, regardless of provider, must conform to university policy. This may require operational changes in core and local UF IT.

5. As the IT systems evolve, some services may switch between core, local, and coordinated support. As a result, the IT organization must provide the mechanism for (a) meaningful engagement processes for understanding needs and concerns of IT professionals and end-users, and (b) effective governance processes for institution-wide recommendations and decision making.

PROPOSED ORGANIZATION

The proposed organization is shown in Figure 5.

\(^2\) Some authors have referred to this coordination as a “layered” service model. Some functions are performed centrally while others are performed locally. Working together, a service is provided for the UF community. See, for example, “Beyond the False Dichotomy of Centralized and Decentralized IT Deployment,” by Jim Davis in “The Tower and the Cloud: Higher Education in the Age of Cloud Computing,” Richard Katz, editor, Educause, 2008.
Figure 5: Proposed organization for UF IT. Units in grey are new. Others are pre-existing.
NOTES TO Figure 5

1. The reporting structure for the CIO is to be determined. In many large public universities, the CIO reports directly to the President.

2. The IT Cabinet assists the President and CIO in decision making regarding major IT initiatives and investments. See Governance.

3. The IT Policy Council, through its subcommittees, makes recommendations to the CIO. The CIO decides whether to implement, reject, or return the recommendations for further consideration; or involve the IT Cabinet and the President in decision-making. See Governance.

4. The CIO has nine reports. Five units—Academic Technology, University Systems (new), Computing and Networking Services, IT Security and Compliance (new), and Web Administration report directly to the CIO and provide services university-wide. Four units—HSC IT (Academic Information Systems and Support), IFAS IT, Administrative IT (Operations Analysis) and E & G IT, provide customized services to parts of the University. These four units report to their corresponding Sr. VP, and to the CIO for policy, compliance and university IT program development. The Senior Vice Presidents fund these units, establish their priorities and supervise their directors. The directors are jointly evaluated by the Senior VPs and the CIO. All nine CIO reports should have annual “360” evaluations involving feedback from customers, colleagues and their reports.

5. The functions listed under each unit are examples—many of the units have many more functions.

6. University Systems supports UF-wide enterprise systems as indicated. Since most of these systems are already provided by Bridges, Student Records, and other developers and system maintenance personnel, it is recommended that this new unit contain all or parts of these existing units that provide enterprise system services.

7. IT Security and Compliance is made up of existing security professionals dedicated to securing UF IT assets and enforcing IT policies.

8. E & G IT is a new unit providing coordination between the CIO and the Provost. As with the other dual report groups, the E & G IT unit provides customized services to the nine E & G colleges reporting to the Provost and serves as an IT liaison between those colleges, the Provost and the CIO.

9. See the Addenda for a list of core IT services.

Roles and Responsibilities of the CIO

1. Development and execution of IT Strategy in alignment with university mission.

2. Development of an effective and efficient IT workforce.

3. Development and enforcement of IT policy.

4. Delivery of appropriate, effective, efficient, sustainable and secure IT services to the UF community.
6. UF IT Core Funding Model Recommendations

Purpose

There are a few familiar ways to pay for UF IT services. We use all of them and more, but not always consistently or appropriately. Total expenditures for UF IT services are approximately $100,000,000/year—split roughly 50-50 between core IT and distributed IT services. This report proposes some changes to the way some core IT services are funded. Recommendations regarding funding for Distributed IT services are beyond the scope of this report.

The total cost of core IT services has remained flat. Some little used legacy services have been retired. New services have taken their place. Central service organizations have been restructured and savings have been reallocated.

The total funding to cover the "cost-to-continue" ongoing operations has not remained stable. Every year, firm "funding commitments" need to be renegotiated and often are not determined to well into the fiscal year.

Current core IT budgets are consumed by ongoing operations. This means that important upgrades had to be deferred and sometimes promising opportunities for cost effectiveness and efficiencies have been missed. Like any unit, core IT needs to have strategic investment funds to sponsor the introduction of new technologies and to remedy deferred maintenance.

Funding Methods

There are 4 ways to pay for IT services: Baseline, Chargeback, Base-Plus, and Project. For most IT services, one of these methods is preferred.

1. Baseline Funding

Baseline funding is commonly called "off-the-top." For core IT services, that means the service is paid for centrally, and provided free of charge to all members of the UF community. Baseline funding is appropriate when all of the following criteria are met:

- The service is **shared**. It is widely available and widely used by many in the UF community. Examples include the data network, the student system, the help desk ...
- The service is **standardized**. It provides basic features and functions. It performs up to minimum services levels. And it works the same everywhere.
- The service is **leveraged** by economies of scale. It is measurably more efficient to run a large consolidated service than many separate smaller ones.
- The funding need is **recurring**. A fixed annual amount is provided to cover the "cost to continue" ongoing operations—including maintenance and repairs, some minor enhancements, and capital equipment replacement.
- The funding amount is **fixed**. Annual adjustments are needed to cover the cost of mandatory across-the-board pay raises. Otherwise, continuous improvements in staff productivity and/or technology price/performance should be enough to cover incremental increases in capacity and demand.

2. Chargeback Funding

Chargeback funding is commonly called "user-fees." For core IT services, that means the service is offered at
some price-per-unit, and people pay for whatever they choose. Chargeback funding is most appropriate under the following circumstances:

- Users and units want to **choose the kind** of service that works best for them. There are a few alternative providers and products. All must meet minimum standards. Examples are things like telephone lines. Some people want desktop telephones. Some people need cell phones. Some have neither. Some have both.
- Users and units want to **choose the quantity** of service that works best for them. Needs vary. Examples include things like long distance. Some people use more. Some use less. Some don't use it at all.
- Users and units want to **choose the level** of service that works best for them. Basic services are widely available and competitively priced. Advanced features and functions are sometimes offered at a premium price. Examples include VoIP telephone handsets like the 7940 vs. the 7960. Some people need multiple line appearances and call handling capabilities. Some people just want dial tone.
- Prices are set for **cost recovery**. Costs include both ongoing operating expenses and any amortized costs for capital equipment replacement.
- Charges are based on **measured usage**. Volume discounts and/or fixed price annual contracts are sometimes useful.
- Chargeback funding creates **administrative overhead**. Internal billing systems and staff are required. Strict rules must be followed. Annual reports must be filed. Central taxes must be paid. The burden of choice should not exceed the benefit.

3. **BASE-PLUS FUNDING**

   Base-Plus funding is commonly called "a la carte." It is a combination of Baseline funding for standard service levels, and Chargeback funding for advanced service levels. Base-Plus funding is most appropriate under the following circumstances:

   - Standard service levels meet the needs of most users. For example: one 100 MB LAN connection per person per office. This is a standard service—provided "free."
   - Advanced service levels are needed by some users. For example: 1 GB to the desktop, and/or multiple ports per office. These are advanced services—for a "fee."
   - Continuous improvements evolve advanced services into the next/new standard.
   - Supply and demand remains reasonably in balance. For the majority of users, baseline funding avoids all the overhead burden of chargeback. And for advanced services, user fees serve to limit consumption, which is the best of both worlds.

4. **PROJECT FUNDING**

   Project funding is commonly called "one-time." For smaller projects, it can be used to sponsor innovation. For major projects, it is a way to deal with "deferred maintenance." Project proposals of major cost or benefit are reviewed and recommended for funding through the IT Governance process. There will be more potential projects than we can possibly fund. A pool of recurring funds should be set aside annually to fund the highest priority projects. Project funding is most appropriate under the following circumstances:

   - For smaller projects, a **Strategic Investment Fund** should be set aside annually to startup new initiatives. It would operate like an internal grant. Proposals are solicited, evaluated, rated, and ranked. A few high priority projects are funded.

   - Selected **Research and Development** projects could be sponsored to evaluate and introduce new technologies into our teaching and learning processes. Examples include:
training, tools, and support for things like—online course development, virtual labs, virtual worlds, iTunes libraries, Google Apps, etc

- Selected Cross-Functional Collaborations could be sponsored to encourage and enable local units to share expertise, and to give and get help among their peers. Examples include things like desktop support for non-Microsoft platforms, or best practices for information security policy compliance.

- For major projects, Special Funding Commitments need to be arranged. These would operate like capital improvement projects. Proposals are solicited, evaluated, rated, and ranked. A few high priority projects are occasionally funded.
  - Project proposals include an analysis of costs and benefits. Scope and scale are clearly explained. Deadlines and deliverables are firm commitments.
  - Project proposals include an environmental impact analysis. That means we need to notify in advance, anyone who will be impacted by the change. And tell them exactly what they need to do to make it work, and/or reap the benefits.
  - Project proposals include the estimated cost of ongoing operations. When a Research and Development project successfully "proves the concept," how much will it cost to roll out the new capability? And how much will it cost to sustain ongoing operations?

**CURRENT PROBLEMS**

Current UF IT funding methods are sometimes inconsistent and/or inadequate to meet UF IT funding needs. More importantly, current funding methods are often unable to assure sustainable funding for the ongoing operations of UF IT services.

1. **Non-Recurring Funds** are sometimes used to pay for ongoing operations. Examples include internal grants, and carry forward balances. Such funds may not always be available or allocated.
2. **Non-Binding Commitments** are sometimes used to pay for ongoing operations. Examples include internal transfers, and fixed-price contracts. Both of these are forms of "pseudo chargeback." People may decide that they no longer want to pay.
3. **Inconsistent Funding Methods** are sometimes used to pay for ongoing operations. Examples include different units using different methods to fund similar services. Costs of services can vary.
4. **Capital Equipment Depreciation** is often omitted from annual operating budgets. Examples include hardware/software upgrades, and life-cycle equipment replacements. Capabilities of services will vary.
5. **Strategic Investment Funds** have not been set aside to sponsor new initiatives. Examples include startup funds to introduce innovative new technologies, and special project funds to remedy deferred maintenance. Process improvements and/or cost saving opportunities may be missed.

**REMEDIAL ACTIONS**

The proposed funding model (on the following pages) assures that all funds necessary to cover the cost-to-continue core IT ongoing operations are both visible and stable. This proposal recommends replacing various sources of "one-time" funding, with some form of "recurring" funding appropriate to the type of service being provided.

1. **Provide Baseline funding for core IT ongoing operations** that are not otherwise sustainably funded (via Chargebacks or Grants). This action is revenue neutral.
   - **CNS:** move $3,500,000 from "pseudo chargeback" to Baseline funding.
   - **Bridges:** move $10,700,000 from "pseudo chargeback" to Baseline funding.
   - **Telecom / CIO / AT:** no change.
2. **Provide Baseline/Grant funding to sponsor innovative new technologies** and remedy deferred maintenance. This action requires an additional $4,000,000 / year.
   - **Bridges**: add $1,000,000 / year for periodic enterprise system upgrades.
   - **AT**: add $2,000,000 / year classroom technology upgrades.
   - **CIO**: add $1,000,000 / year for new technology initiatives.
   - **Telecom / CNS**: no change.

3. **Engage senior management in strategic funding decisions** and priority setting. This action is essential to realizing a return on major IT investments.
   - **Review proposals**: solicit, evaluate rate, and rank.
   - **Fund projects**: select high priority projects.

4. **Measure results**: recognize and reward performance.
## Table 2
### CORE IT CURRENT FUNDING SOURCES (01/06/09)

<table>
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<th>Source</th>
<th>Expense</th>
<th>Revenue</th>
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<td></td>
<td>baseline</td>
<td>chargeback</td>
</tr>
<tr>
<td></td>
<td>state allocation</td>
<td>aux + IDC</td>
</tr>
<tr>
<td>CNS + Telecom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computing</td>
<td>5,900,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>Networking</td>
<td>5,900,000</td>
<td>4,000,000</td>
</tr>
<tr>
<td>Information Security</td>
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<td>500,000</td>
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</tr>
<tr>
<td>Telecommunications</td>
<td>5,200,000</td>
<td>5,200,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18,500,000</td>
<td>8,300,000</td>
</tr>
</tbody>
</table>

| Bridges               |         |         |         |         |           |           |  |
| Bridges (2)           | 14,325,000 | 3,625,000 | 0      | 10,700,000 | 0 | 0 | 14,325,000 |
| Deferred Maintenance  | See note 3 | 0      | 0    | 0        | 0 | 0 | 0 |
| **Total**             | 14,325,000 | 3,625,000 | 0      | 10,700,000 | 0 | 0 | 14,325,000 |

| Academic Technology   |         |         |         |         |           |           |  |
| CITT                  | 837,000  | 428,000  | 0      | 0        | 0 | 0 | 837,000  |
| Teaching Center and Testing | 2,612,000 | 523,000  | 0      | 0        | 1,629,000 | 460,000 | 2,612,000 |
| Customer Support      | 5,258,000 | 3,771,000 | 1,255,000 | 0 | 78,000 | 154,000 | 5,258,000 |
| Classrooms and Labs   | 1,393,000 | 1,213,000 | 180,000 | 0        | 0 | 0 | 1,393,000 |
| Deferred Maintenance  | See note 3 | 0      | 0    | 0        | 0 | 0 | 0 |
| **Total**             | 10,100,000 | 5,935,000 | 1,435,000 | 0 | 1,707,000 | 1,023,000 | 10,100,000 |

| CIO                   |         |         |         |         |           |           |  |
| Student Systems       | 1,700,000 | 1,700,000 | 0      | 0        | 0 | 0 | 1,700,000 |
| Web Administration    | 600,000  | 600,000  | 0      | 0        | 0 | 0 | 600,000  |
| Active Directory and Exchange | 220,000 | 220,000  | 0      | 0        | 0 | 0 | 220,000  |
| OIT and HPC           | 555,000  | 555,000  | 0      | 0        | 0 | 0 | 555,000  |
| **Total**             | 3,075,000 | 3,075,000 | 0      | 0        | 0 | 0 | 3,075,000 |

**Total -- Core IT**: 46,000,000

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(1) "pseudo chargeback" is a catch all for auxiliary (fund 144) and IDC (fund 211) fixed amount internal transfers. It is not revenue generated from measured usage, not some quantity of service sold at some unit-price. It is a mix of legacy "taxes and transfers", long ago committed and still used to pay for a variety of central services.

(2) "additional spending" from the Bridges budget, for Finance & Admin related purposes ($4M/yr), is not included here.

(3) "deferred maintenance" for Bridges ($1M), Classrooms ($2M), and CITT-Faculty Support ($1M) is also not included here.
# Table 3

## CORE IT STABILIZED FUNDING MODEL (Step 1)

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<th>Revenue</th>
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<td></td>
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<td>BASELINE State allocation</td>
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<td>Computing</td>
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<td>5,500,000</td>
<td>400,000</td>
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<tr>
<td>Networking</td>
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<tr>
<td>Information Security</td>
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<td>Contract Services</td>
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<td>Telecommunications</td>
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<td>5,200,000</td>
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<td>CNS + Telecom</td>
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<td>11,800,000</td>
<td>6,700,000</td>
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<tr>
<td>Bridges</td>
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</tr>
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<td>CITIT</td>
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<tr>
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<td>Classrooms and Labs</td>
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<td>180,000</td>
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<td>Deferred Maintenance</td>
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<td>CIO</td>
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<td>Student Systems</td>
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<td>8,135,000</td>
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</table>

(1) Replace "pseudo chargeback" with baseline funding ("pseudo chargeback" amount from Table 2 was added to the baseline column.)
(2) Add Strategic Investment Funds to sponsor new technology initiatives ($1M/yr).
(3) Add Deferred Maintenance Funds for enterprise system upgrades ($1M/yr) and classroom technology upgrades ($2M/yr).
## Table 4
### FUNDING MODEL FOR RESTRUCTURED OIT (Step 2)

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<tr>
<td>Customer Support</td>
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<td>Classrooms and Labs</td>
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<td>180,000</td>
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<td>3,393,000</td>
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<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,100,000</strong></td>
<td><strong>5,935,000</strong></td>
<td><strong>1,435,000</strong></td>
<td><strong>0</strong></td>
<td><strong>3,707,000</strong></td>
<td><strong>1,023,000</strong></td>
<td><strong>12,100,000</strong></td>
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<tr>
<td>OIT and HPC</td>
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<td>Web Administration</td>
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<td><strong>Total</strong></td>
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<td><strong>1,000,000</strong></td>
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<tr>
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<tr>
<td>IT Security and Compliance</td>
<td>500,000</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>50,000,000</strong></td>
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Major restructuring changes include:
- Consolidate infrastructure by moving hardware, software, and systems-administration from Bridges to CNS.
- Consolidate applications by merging Bridges, Student Systems, Web Administration, and Active Directory/Exchange.
- Continue support services within Academic Technology including the Helpdesk and IT community engagement activities.
- Consolidate information security as recommended in the IT Organization Proposal.
- Improve information security policy compliance by repositioning Information Security reporting directly to the CIO.

February 2009
7. UF IT PRIORITY PROJECTS

BACKGROUND
The IT Action Planning process solicited input from multiple sources. Recommendations have been received from ITAC Committees, IT Management, IT Focus Groups, IT Open Forum participants, the ITAP Wiki, the ITAP suggestion box, and from ITAP Task Force members.

COMMON THEMES
Three high priority actions have been recommended by all of these sources concerning higher-level management issues addressed elsewhere in this report.

1. Effective IT Governance: including extensive UF community engagement, senior management involvement and funding set aside for high priority projects.

2. Sustainable IT Funding: including recurring funds for ongoing operations, strategic investment funds for high priority projects and capital equipment replacement costs recognized as annual depreciation charges.


PROPOSED IT SERVICE IMPROVEMENTS
The following is a list of priority projects submitted for consideration of the IT Steering Group. It is not inclusive of all high priority projects, and we would recommend that consideration for selection and decisions go through the proposed IT Governance structure. Final approval of projects of this scope would be made by the IT Cabinet and that group would in turn recommend new funding at the appropriate levels.

1. Build a second off-site data center. Provide a modern secure facility for protected data and research computing. Establish dual site operations for critical business continuity and disaster recovery. Provide virtual server hosting.

2. Improve support for instruction. Evaluate options for a new Course Management System. Extend Help Desk hours of operations to 24 hours per day, 7 days per week. Expand wireless coverage to all teaching buildings. Provide Microsoft Office to all UF students.

3. Improve support for enterprise systems. See organizational recommendations. Provide systems and support for business process improvements in Research Administration, Business Intelligence, and Responsibility Center Management. Commit to regular upgrade of ERP systems ($1M/yr). Evaluate options for Financial Aid System replacement.

8. ADDENDA

ADDENDUM 1: LINKS TO INPUT FROM ITAC SUB-COMMITTEES AND STAKEHOLDERS

- ITAC Data Infrastructure Committee IT recommendations (.doc, 32KB)
- ITAC Network Infrastructure Committee IT recommendations (.doc, 32KB)
- ITAC High-Performance Computing Committee IT recommendations (.doc, 32KB)
- ITAC Information Security Management Committee IT recommendations (.doc, 44KB)
- ITAC Academic Technology Committee IT recommendations (.xls, 24KB)

SUMMARY OF ENGAGEMENT ACTIVITIES

- UF Community Townhall Input—December, 2008 (.doc, 96KB)
- Summary of strategic directions gleaned from UF community engagement.
ADDENDUM 2: CHARGE LETTERS TO THE IT STEERING GROUP AND THE ITAP TASK FORCE.

J. Bernard Machen
President

October 6, 2008

TO: Joe Glover, Doug Barrett, Frank Bova, Kyle Cavanaugh, Jimmy Cheek, Matt Fajack, Win Phillips, Ed Poppell

FROM: J. Bernard Machen

RE: Establishment of an Information Technology Steering Group

As you know from earlier conversations, I will be putting a major focus on improving information technology this year. To start this, with my approval, Kyle has appointed Chuck Frazier as Interim CIO. Chuck will work through Kyle and senior leadership to facilitate and help carry out some in-course adjustments designed to better prepare us to operate under a CIO. Some of the needed adjustments have been in process for some time and will continue as I have approved and directed. The process for developing the other specific changes, methods, and timeframes will involve two groups. The first group will be comprised mainly of technical sorts. It is called the IT Action Plan Task Force and Chuck will chair it. While this action plan Task Force can do a lot of the ground work, idea development, and document preparation. I want there to be a second senior leadership group that helps shape and that ultimately screens proposals that come to me.

This second group will be called the IT Steering Group. It will be comprised of the eight people listed above. The timeframe set for this IT change work is short. Both groups should be ready to start on or around October 10, 2008. I would like a final set of recommended actions approved by and forwarded from your group by January 30, 2009. When the action plan comes to me for final consideration, it should have the full agreement of this IT Steering Group. There is an action plan document we will discuss later that outlines the steps in the process, methods of engaging the stakeholder groups, and methods of communications and interactions during the process of developing recommendations. For now, I need only your agreement to serve.

Kyle J. Cavanaugh
Senior Vice President
for Administration
October 6, 2008

TO: Mike Conlon, Mike Corwin, Faculty Representative (TBD), Tim Fitzpatrick, Chuck Frazier, Joe Joyce, Bernard Mail, Mark Orazem, Jan van der Aa, Fedro Zazueta

FROM: Kyle Cavanaugh, Senior Vice President for Administration

RE: Service on an IT Action Plan Task Force

This academic year UF will be putting major focus on improving Information Technology. President Machen wants to be sure that we have a strong foundation for core UF IT services as he moves forward with a plan to hire a CIO to oversee UF IT. Most of you know already that I appointed Chuck Frazier as Interim CIO effective August 1. I asked Chuck to return to duty to help lead and facilitate the development of a short-term IT action plan. The purpose of having a short-term plan is to shore up some foundation issues before moving ahead with a national search for a CIO. President Machen has directed some changes that will be announced soon. The process for developing other aspects of an action plan will involve two main working groups. The first group is the IT Action Plan Task Force. It will be comprised of the nine people listed above and will be chaired by Chuck.

The charge for this group will be to develop a set of actionable recommendations that will structure UF IT to operate under a CIO and build a firm base for further development. I will ask you to look at issues such as sustainable funding, efficiency and performance measurement, IT Governance and priority setting, combining like functions and services, and cost effectiveness. Your task is very important and the work will not be easy. Further, I will ask you to begin soon starting on October 10, 2008. Your specific charge will be to develop and recommend actions that can be either carried out immediately or near-term and that can positively impact UF core IT and UF-wide IT services. The deliberation process has to be transparent, inclusive of stakeholder and administrative leadership input, and fast. I will ask that a draft Task Force report be completed by the end of the first week in January, 2009. Your Task Force will meet twice a week for one and a half hours until the draft report is completed. Sub-groups with different or additional members may be appointed and charged as appropriate.

A second group has been established by President Machen that will work closely with your group. It is called the IT Steering Group. The members of the Steering Group are as follows: Doug Barrett, Frank Bova, Kyle Cavanaugh, Jimmy Cheek, Matt Fajack, Joe Glover, Win Phillips, and Ed Poppell. Chuck Frazier will be ex-officio and will work back and forth between the two groups. Having the two groups work in consort will assure alignment of priorities, goals and commitments. The IT Steering Group will review and approve Task Force recommendations and will forward a final report to President on or before January 31, 2009.
### ADDENDUM 3: UF CORE IT SERVICES

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Academic Technology</strong></td>
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</table>
| **Center for Instructional Technology and Training (CITT)** | 1. Training  
2. Walk-in support area  
3. On-line course development and technology enhanced course support  
4. Faculty Development  
5. Captioning                                          |
| **Communication & Outreach**                  | 1. Web Pages  
2. AT Newsletter (Teaching with Technology)  
3. Teaching by Design Newsletter  
4. Faculty Showcase and Symposium  
5. Brown Bag Sessions  
6. Collaboration with other units (e.g. new faculty orientation)  
7. Contact/collaboration with relevant organizations (LTC, EDUCASE, ELI, ECAR, SAKAI) |
| **Computer Classrooms and Labs**              | 1. Computer lab facilities on campus, with 474 computers  
2. Computer classrooms  
3. A mobile laptop lab is provided to create a computer classroom in any location with either wired or wireless networking. |
| **Instructional Computing Services**          | 1. A general-purpose computing services, grove.ufl.edu  
   a. Instructor and class accounts,  
   b. Specialized academic packages  
   c. Programming in a variety of computer languages for instructional use  
   d. Hosting of access-controlled, dynamic web pages for instructional use  
2. Class-based collaboration and social software tools not available in WebCT (Blackboard)  
3. Specialized needs servers (e.g. streaming video, multi-media database applications, tutor scheduling and concurrent license management for academic software)  
4. Integration of the WebCT course management application with the UF student information system  
5. Servers and other hardware and software used for testing services:  
   a. Administration, scoring and grade-keeping  
   b. State-wide administration of the CLAST test (including training and trouble-shooting at remote sites)  
   c. Scoring of answer sheets grade uploads  
6. Programming support to provide account management, web pages, and web-based authentication for the UF GatorLink computing account  
7. File, database, and web servers that are used by other AT units to support their mission  
8. Management of servers for basic AT networking infrastructure support (e.g. name servers and DHCP servers) |
| **Instructional Facilities and Support**      | 1. Computer Classrooms and Labs  
2. General Classrooms  
3. Faculty Support  
4. Equipment Rental and Checkout |

February 2009
## 2009 University of Florida Information Technology Action Plan

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
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</thead>
</table>
| **Learning Support Systems** | 1. Course Management System – E-Learning system  
3. Audio chat services  
4. Course management support software  
5. Rapid Development Team. |
| **Software Licensing Services** | 1. Acquisition, distribution, tracking, and metering of software licenses.  
2. Technical Support.  
3. UF Software CD |
| **Testing Services** | 1. Contract Testing  
2. Scanning and Scoring  
3. Testing for University of Florida students  
4. External Testing |
| **The Teaching Center** | 1. Tutoring Services  
   a. Walk-in  
   b. Appointment  
   c. Test Reviews  
2. Supplemental Instruction  
3. Study Skills/Learning Strategies Advisement  
   a. Individual Appointments  
   b. Workshops  
4. Teaching Assistant Training  
5. AT-TV Programming  
6. Reading and Writing Center:  
   a. Individual instruction  
   b. Workshops |
| **UF Computing Help Desk** | 1. Phone, Email, Walk-in Consulting  
   a. Account Services  
   b. Technical Consulting  
   c. Administrative and Faculty Support  
   d. Client Self-Service  
   e. Single-Point of Contact Network  
2. Laptop and Handheld Support  
3. Applications Support Center Services  
   a. Electronic thesis and dissertation services (ETD)  
   b. Desktop Applications Support.  
   c. Course Management System Walk in support.  
4. Desktop Software Sales |
| **Video & Collaboration Services** | 1. Streaming Media  
2. Satellite  
3. Point to Point Video Transmission  
4. Videoconferencing  
5. Campus Cable TV |

### Computer and Networking Services

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
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</thead>
</table>
| **Computing Infrastructure** | 1. Data Center Facilities – SSRB & CSE  
2. Data Center Operations – 24 x 7 x 365  
3. Data Backup Offsite – daily to Atlanta  
4. Enterprise Systems Hosting – Student, HR, Finance, E-mail, Directory,  
5. Campus-wide Network |
WebCT
5. Departmental Server Hosting – virtualized servers, web sites, managed applications
6. Hardware and Software – purchase, installation, maintenance, upgrades, repairs, replacement
7. Systems Management – capacity and utilization, monitoring and troubleshooting
8. Life-Cycle Management – Capital Expense, Operating Expense, volume discounts

<table>
<thead>
<tr>
<th>Network Infrastructure</th>
<th>1. Building LANs (Wall-Plate)</th>
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<tbody>
<tr>
<td></td>
<td>2. Campus Fiber Plant</td>
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<td></td>
<td>3. Campus Wireless Network</td>
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<td>4. Campus Backbone Network</td>
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<td>5. Campus Research Network</td>
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<td>6. Statewide Research Network (FLR)</td>
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<td>7. National Research Networks (NLR &amp; I2)</td>
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<td></td>
<td>8. Commodity Internet Access (I1)</td>
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<td></td>
<td>9. DNS, DHCP, VPN, NOC – on call 24 x 7 x 365</td>
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</tbody>
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<thead>
<tr>
<th>Telecommunications</th>
<th>1. Telephone Lines – VoIP, Centrex, Key Systems</th>
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<tbody>
<tr>
<td></td>
<td>2. Telephone Support – installation, maintenance, repair</td>
</tr>
<tr>
<td></td>
<td>3. Long Distance – intrastate, interstate, international, calling card</td>
</tr>
<tr>
<td></td>
<td>4. Dedicated Circuits – metro area links to off campus locations</td>
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<tr>
<td></td>
<td>5. Dedicated Circuits – statewide links to off campus locations</td>
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</tbody>
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<table>
<thead>
<tr>
<th>User Support and Communications</th>
<th>1. /Update – the quarterly newsletter for CNS</th>
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<tbody>
<tr>
<td></td>
<td>2. IT Connections – the quarterly newsletter for all of OIT</td>
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<td></td>
<td>3. CNS Web Site – home page and links to other CNS units and services</td>
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<td></td>
<td>4. Tier-2 Support – for GatorLink E-mail and questions referred to CNS by the UF Help Desk</td>
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<td>5. LISTSERV – campus-wide E-mail lists requested by UF faculty and staff</td>
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<td>6. Telecom Work Orders – entry, processing, tracking, and billing</td>
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<thead>
<tr>
<th>Information Security and Compliance</th>
<th>Service</th>
<th>Description</th>
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<tbody>
<tr>
<td>Policy, Procedures and Standards</td>
<td>1. Risk assessment</td>
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<tr>
<td></td>
<td>2. Data security (PER, PII, PCI)</td>
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<td>3. Incident response</td>
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<td>4. Portable devices</td>
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<td>5. Removable media</td>
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<td>6. Passwords</td>
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<td>7. Encryption</td>
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<tr>
<td>Awareness and Training</td>
<td>1. ITSA day</td>
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<td>2. Lightning Talks</td>
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<td>3. Peer-to-Peer</td>
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<td>4. Faculty and IT Orientations</td>
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<td>5. Cyber Self-Defense</td>
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<tr>
<td>Risk Management</td>
<td>1. Inventory and evaluate assets.</td>
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<td>2. Determine vulnerabilities and threats.</td>
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<td>3. Estimate impacts.</td>
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<td>4. Recommend safeguards.</td>
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</table>
## Incident Response
1. Monitor threats and issue alerts.
2. Detect incidents and notify departments.
3. Report number of incidents and average time to containment.
4. Respond to DMCA complaints.

## Forensic Investigations (incidents involving the exposure of restricted data)
1. Collect evidence (make a system image).
2. Discover and interpret compromises.
3. Correlate with system and network logs.
4. Assess the likelihood that any restricted data was in fact accessed.

### University Systems

<table>
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<tr>
<th>Service</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Academic Applications and web sites</strong></td>
<td>1. UF Home Page</td>
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<tr>
<td></td>
<td>2. Approval.ufl.edu for tracking academic processes</td>
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<tr>
<td></td>
<td>3. evaluations.ufl.edu for faculty evaluations of teaching</td>
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<tr>
<td><strong>Business Intelligence</strong></td>
<td>1. My Reports</td>
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<td>2. Enterprise Reporting</td>
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<td>3. Cognos Reporting</td>
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<td>4. Cubes for analytics, Enterprise Data warehouse</td>
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<td></td>
<td>5. Warehouse interfaces to departmental systems</td>
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<tr>
<td><strong>Financial Management</strong></td>
<td>1. Accounts Receivable and Billing</td>
</tr>
<tr>
<td></td>
<td>2. Asset Management and Property Tracking</td>
</tr>
<tr>
<td></td>
<td>3. General Ledger and Budgets</td>
</tr>
<tr>
<td></td>
<td>4. Purchasing and Payables</td>
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<tr>
<td></td>
<td>5. Travel and Expense</td>
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<tr>
<td><strong>Human Resources</strong></td>
<td>1. Benefits</td>
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<td>2. Hiring and Job Actions</td>
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<td>3. Payroll</td>
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<td>4. Time and Labor</td>
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<tr>
<td></td>
<td>5. Training Services</td>
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<tr>
<td><strong>Identity Management</strong></td>
<td>1. UF Directory</td>
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<tr>
<td></td>
<td>2. UFID, GatorLink Account Management and Authentication</td>
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<tr>
<td></td>
<td>3. UF Active Directory</td>
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<td>4. Shibboleth</td>
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<td>5. LDAP</td>
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<td>6. Kerberos</td>
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<td>7. Netware Directory</td>
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<td>8. Services</td>
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<td>9. Guest Accounts</td>
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<tr>
<td><strong>MyUFL</strong></td>
<td>1. Portal</td>
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<td>2. Access Request System for security role management</td>
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<td></td>
<td>3. Access to enterprise applications</td>
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<td></td>
<td>4. UF News</td>
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<tr>
<td><strong>Research Administration</strong></td>
<td>1. Pre-and post-award support including protocol and budget development</td>
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<tr>
<td></td>
<td>2. Approval workflow</td>
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<tr>
<td></td>
<td>3. Contract, award, proposal and project tracking</td>
</tr>
<tr>
<td></td>
<td>4. Budget and expenditure management and reporting</td>
</tr>
<tr>
<td></td>
<td>5. Sponsor billing and accounts receivable</td>
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<tr>
<td><strong>Student Systems</strong></td>
<td>1. Student Financial Aid</td>
</tr>
<tr>
<td></td>
<td>2. Student Records</td>
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<td></td>
<td>3. Transcripts</td>
</tr>
</tbody>
</table>
4. Registration  
5. Admissions  
6. Student Financials  
7. Advising  
8. Room Scheduling  
9. On-line Catalog

| UF Exchange | 1. Email  
             | 2. Calendaring  
             | 3. [www.mail.ufl.edu](http://www.mail.ufl.edu) resources  
             | 4. Blackberry  
             | 5. Good  
             | 6. Active Synch support  
             | 7. Outlook Web Access |
|-------------|-------------------------------------------------|

| Windows Systems Services | 1. BizTalk Enterprise Service Bus  
                          | 2. Windows Server Updates Services  
                          | 3. Identity Lifecycle Manager  
                          | 4. Key Management Services |
|------------------------|--------------------------------------------------------------------------------|

1 Info Security and Compliance is a proposed consolidation and it is recommended that the new unit report to the CIO.  
2 University Systems is a newly proposed area in this report. Services listed may change and other services included as detailed plans for implementation are developed.