

we are
reimagining IT
at UC Berkeley

Larry Conrad
Associate Vice Chancellor and
Chief Information Officer

August 26, 2014

Setting the Stage

We reimagine IT by working together to enhance the value we provide to the University.

By focusing on the fundamentals of IT service management, modernizing campus systems, and investing in the development of our IT workforce, we can deliver the best possible systems, services and support to the institution.

The IT Action Plan outlines many of the strategic initiatives we are undertaking to accomplish this goal.

Campus IT Action Plan

In response to my assessment of the state of IT at Berkeley, and with input from the campus community, the IT senior management team developed the campus IT Action Plan.

The goal is to ensure that IT services are provided in service of the campus mission and aligned with university strategies.

The IT Action Plan has seven areas of focus, each with unique projects and initiatives.



Focus on the
Fundamentals
of IT Service
Management



Deliver
Excellent
Customer
Service



Expand
Customer
Engagement
& Governance



Improve
Security of
University Data
& IT Assets



Improve
Research
Support



Enable
Campus
Shared
Services



Continuous
Improvement of
IT Applications
& Services

itactionplan.berkeley.edu



Focus on the Fundamentals of IT Service Management

- Our primary approach is to align IT services through the adoption of industry best practices.
- Berkeley is behind the curve in implementing basic IT service management principles that are widely deployed elsewhere across all industries
- IT Service Management (ITSM) is a process-based practice intended to align the delivery of IT services with the needs of our customers.
- Our ITSM program will focus on delivering high value, high quality, and consistent services to the campus community.
- Outcomes of this effort include:
 - Improved efficiency
 - Greater responsiveness
 - Less system down time
 - More effective IT organization

Actions & Accomplishments

- ITSM strategic planning sessions and workshops.
- ITSM Director position created.
- ITIL training for over 130 staff.



Deliver Excellent Customer Service

- Excellent customer service is about delivering high quality services and support that allow our customers to achieve their goals in the most efficient and cost-effective manner.
- Understanding, managing, and delivering on customer goals and expectations are key to creating successful outcomes and satisfied customers.
- Our focus is on infusing customer service principles into every customer touch point, including front line (desktop support), projects, Web presence and more.

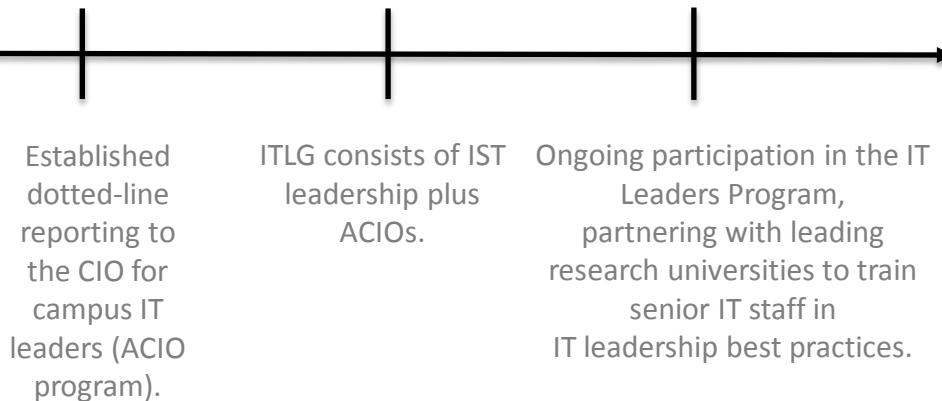
Actions & Accomplishments

- IT Service Excellence training for 80+ ITLG managers and directors.
- Ongoing training and workshops are planned for front line and new staff.



Expand Customer Engagement

Central IT has been viewed at times by many campus IT colleagues as insular, unresponsive, uncooperative, and overbearing. Here's how we're addressing this:



ONE IT

In concert with the ITLG and alumni of the IT Leaders Program, we established the One IT initiative, to focus on building community, and increasing partnership and cooperation among UC Berkeley IT professionals.

Actions & Accomplishments

- Creation of the IT Community Council.
- One IT events build community among IT staff.
- IT Summit gathered 400+ IT staff in June to share work and discuss IT priorities.



IT Governance

One of the critical success factors in delivering excellent information technology services is an understanding of campus goals and strategies, and ensuring IT investments are prioritized and aligned against them as broadly as possible. To achieve these goals we are establishing a comprehensive, campus-wide IT governance model.



Actions & Accomplishments

- Final vetting of model and committee membership in late summer/early fall 2014.
- First meeting of IT Strategy Committee in October 2014.
- First ITEC meeting in January 2015.
- Continuing work to integrate IT governance model decisions with the campus budget process.
- Bringing the IST service prioritization discussion to governance will be the top initial priority.



Improve Security of Data and IT Assets

UC Berkeley has a responsibility to protect key University research and informational assets. The ever-changing landscape of threats and expanded legislation requires a proactive stance against potential vulnerabilities.

Our approach:

- Expanded policy base, education about shared responsibilities for managing critical information assets.
- Strengthened information security compliance program.
- Conduct risk assessments.
- Improved metrics and reporting on University information risk.

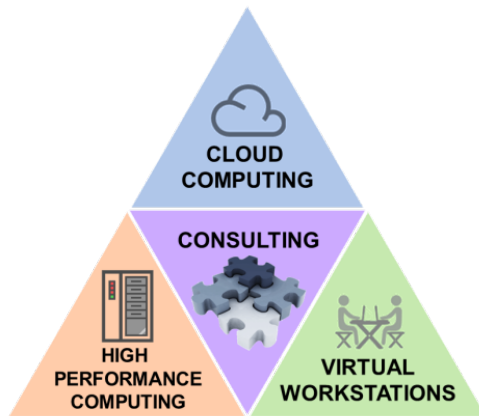
Actions & Accomplishments

- Joint Information Risk Governance body, in collaboration with Assoc. Chancellor Linda Williams.
- Established a Chief Information Security Officer role reporting to the CIO.
- Developed a new and expanded Information Security strategy .
- Doubled the size of investment in the Information Security program.
- Finalizing a proposed set of new and expanded policies to support the new IS Strategy.



Improve Research Support

- In the past five years, campus IT has made little coordinated or sustainable investment in research computing.
- New focus is on partnerships with schools, colleges, and research centers, so IT professionals who understand both the research domain and associated technologies can deliver consulting and implement services for the campus.



**Berkeley Research
Computing Initiative**

Actions & Accomplishments

- Refocusing the IST Research unit to be directly aligned with campus research mission.
- In partnership with the VC Research and the Chancellor, the Berkeley Research Computing (BRC) initiative was launched—a “condo” model.
- In just 2 months of operation, we have already doubled the size of the base cluster with researcher contributions.



Enable Campus Shared Services

- Our goal is to align our services in the areas of automation in order to enable CSS to achieve its objectives.
- Developing a strong partnership between CSS and IST to provide critical infrastructure and tools in support of CSS-IT is essential.

bConnected



is collaboration.



Actions & Accomplishments

- Providing critical infrastructure and tools in support of CSS-IT.
- IT Productivity Suite launched.
- The Berkeley Desktop – providing a common computer image and tools for automated software delivery and updates.
- JACS computer procurement standards.
- Deploying an integrated ticketing system.



Continuous Improvement of IT Applications and Services

- Providing sustained value to the campus community requires continuous upgrading and replacement of key enterprise systems and technology.
- Our commitment is to enable an effective and efficient workforce through the modernization of our technology solutions.
- We are working with our functional partners to ensure that significant projects are assigned an experienced/capable project manager, adequate funding is secured before committing to the projects, and a detailed project plan is created and followed.

CALCENTRAL

bCourses

CalVisitor
free public wifi at UC Berkeley



Actions & Accomplishments

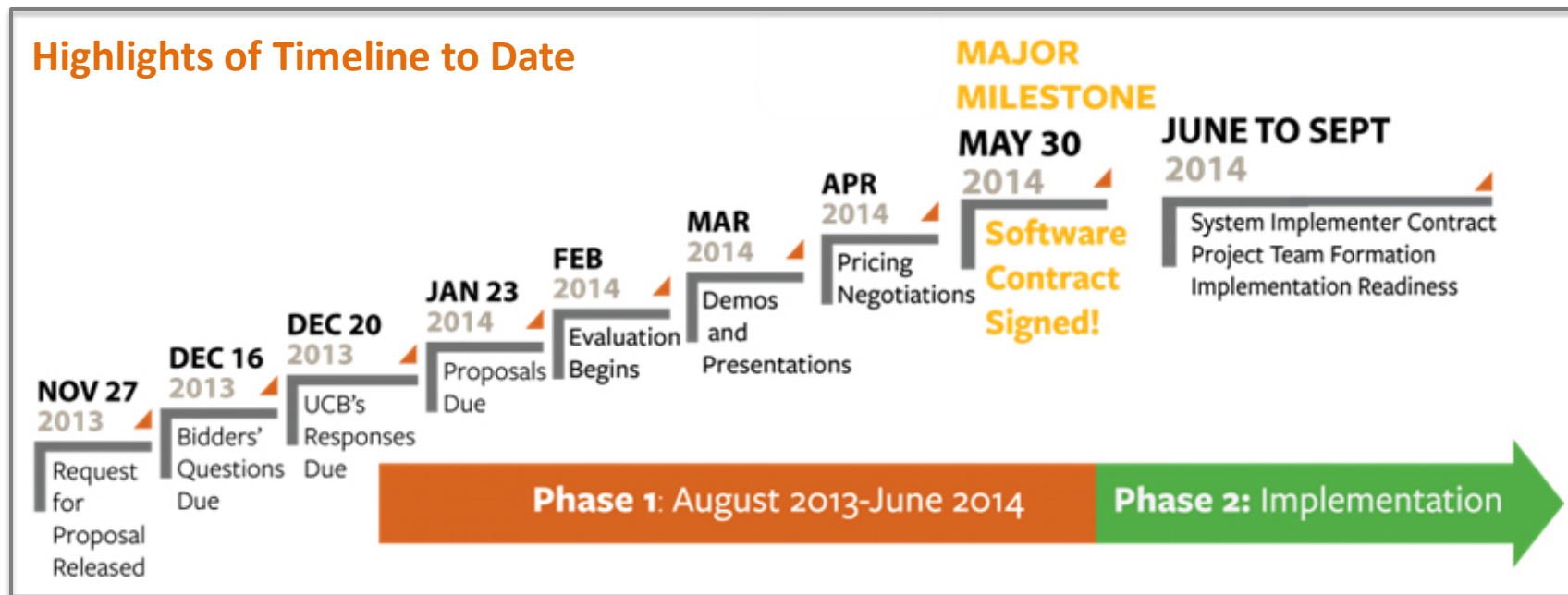
Three strategic programs are part of this initiative:

- Modernizing enterprise applications suite (e.g. CalCentral, bCourses, CalTime, Contracts & Grants, etc.) .
- Replacing outdated set of student systems.
- Upgrading campus wireless networking and cellular telephone infrastructure.

Student Systems Replacement

UC Berkeley has made a strategic decision to replace its constellation of aging, disparate, and internally built and maintained student systems with a modern, nimble and effective vendor-supported system that will include admissions, enrollment, registration, financial aid, student accounts, and advising.

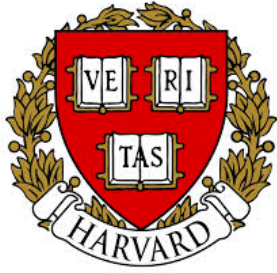
A once in a generation opportunity to improve the student systems experience.



IT Strategic Planning

- The University does not have a current strategic or academic plan. In absence of that, IT is left with no context for pursuing a formal IT strategic plan.
- Research and Academic Engagement benchmarking conducted in collaboration with Research IT, Educational Technology Services (ETS), and University Libraries, serves as an interim vehicle for engaging with executive leadership about IT service priorities for UC Berkeley.
- This will be an initial focal point for the IT Governance structure.

RAE Benchmarking Study: Berkeley Peer Institutions



UC Berkeley Research Services		UC Berkeley Teaching & Learning Services	
Data Analysis: Quantitative & Qualitative	3	Course & Program Evaluation	4
Data Visualization & GIS	3	ePortfolio Support	4
Linked Open Data & Semantic Web	4	Instructional Content Creation	3
Museums, Archives, & Special Collections	2	Learning Management Systems & Support	3
Preservation Services	4	Learning Spaces	3
Research Application Dev. Support	3	Online Courses	3
Research Computing (HPC+)	4	Technology Enhanced Teaching & Learning	3
Research Data Management	4		
Survey Research Support	3		
UC Berkeley Enabling Services			
Collaboration & Communication	3	Software Licensing & Distribution	3
Google Apps for Education	4	Video & Web Conferencing	3
Portals, Dashboards & Aggregators	2	Web Publishing	3
Scholarly Networking	4		

IST Service Prioritization and Review

IST is facing a substantial structural deficit projected to be close to the \$10M/year level beginning in FY15-16.

- Key components of this structural deficit include:
 - Increases necessitated by expansion of the enterprise applications portfolio
 - Productivity Suite
 - Information Security
 - Increased salaries to compete with Silicon Valley private sector companies
- Comprehensive review of the entire IST service portfolio is underway to prioritize services and identify options for cost reduction/reallocation.
- Functioning and effective IT Governance process is needed to address this issue.

Issues & Concerns

- Doubtful \$10M in recurring expense reduction (~1/3 of the IST central budget) can be identified.
- Must be careful that reducing central IT services doesn't increase campus-wide IT costs by creating overlap and duplication.

Special Challenges and Opportunities

Improving Undergraduate Education

- As can be seen from the RAE benchmarking work, Berkeley is significantly behind comparable institutions on providing a support infrastructure for improving teaching and learning and for helping faculty incorporate online content and new pedagogical approaches (e.g., the flipped classroom) into their courses.
- This also impacts BRCOE, since the campus provides inadequate support to faculty for incorporating online content into their courses (from hybrid to fully online), this makes BRCOE's job that much harder because faculty don't have a "context" for designing and delivering online content.

Special Challenges and Opportunities

Disaster and Business Continuity Planning

- Berkeley is at very substantial at risk because of failure to adequately plan for a major emergency event, e.g., something similar to or worse than the 1989 earthquake.
- While many key central systems have off site backups, we have almost no plans for continuing critical IT services in the wake of a significant emergency event.
- While developing such plans is a recommended “best practice,” there is no requirement for campus units to develop such plans ...and no requirement that mission critical services are addressed.
- A recently completed outside Business Impact Analysis review of our IT emergency preparedness has found the state of our planning to be “severely negligent.”



Questions?