

Berkeley PUSHES THE BOUNDARIES OF KNOWLEDGE, CHALLENGES CONVENTION AND EXPANDS OPPORTUNITY TO CREATE THE LEADERS OF TOMORROW.

ONE IT Berkeley's IT professionals work together to provide the tools, data, and infrastructure the campus community needs to continue to grow as the world's greatest public research university.

Key Strategies from Berkeley's 10-Year Vision

Berkeley empowers engaged thinkers and global citizens to change our world.

Berkeley focuses on the good to address society's great challenges.

Berkeley embraces the California spirit: diverse, inclusive, entrepreneurial.

One IT Goals to Support Campus Strategies

G1 Provide all students the essential tools and data they need to be engaged thinkers and global citizens.

G2 Develop the research cyberinfrastructure Berkeley needs to address society's great challenges and to share knowledge for the public good.

G3 Create a diverse and inclusive community of IT professionals who are trusted and strategic partners with the campus, alumni, and the public.

Priorities for FY20:

- SIS Phase 2
- Student Advising Support
- Digital Learning Initiative
- Student Computing @ Cal

Priorities for FY20:

- Secure Research Data and Computation
- Data Science Tools and Infrastructure

Priorities for FY20:

- One IT Diversity and Inclusion
- IT Professional Development
- Campus IT Governance

Berkeley's IT Foundation

G4 Sustain the IT foundation for campus faculty, staff, students, and alumni. Improve campus IT systems and infrastructure through innovation, sustainable funding, campus governance, and organizational evolution. Support all One IT goals and campus strategies above.

Priorities for FY20:

- Next Generation Wi-Fi
- Security IS-3
- Launch Cloud Management and Container Platforms
- Open Access
- Campus Campaign Technologies
- Enterprise Data Lake
- Regional Service Model Tools
- UCSF Strategic Partnership
- Smart Campus Proposal

One IT Strategy Overview for FY19-20

With this most recent update of the Reimagining IT Strategic Plan, the One IT community has now directly aligned its work to support the campus's strategic plan. In July 2019, IT Leaders identified 18 top priority IT initiatives that most directly serve the campus strategic plan for fiscal year 2020. These priorities were reviewed and confirmed with senior campus leaders in August 2019.

This year's key focus will be on managing and measuring progress towards realizing our four ReIT goals --- strategic management. Critical to this is the success of the 18 top priority initiatives. We will ensure that each of these key initiatives succeeds and contributes to the campus' most important goals.

On this and the next page, you will find summaries of the top IT priorities for FY20. These are organized by the three major campus strategies and by the provision of core IT systems and infrastructure all of the campus relies on for its day-to-day work --- the campus' IT foundation. These top IT Priorities represent a small fraction of the totality of One IT work; on page 5 find more detail of the operational and projects priorities for 23 One IT units.

Campus Strategy: Berkeley empowers engaged thinkers and global citizens to change our world.	
G1 One IT Goal 1: Provide all students the essential tools and data they need to be engaged thinkers and global citizens.	
IT PRIORITIES	SIS Phase 2: Complete the work remaining from the original implementation effort which will improve the effectiveness, stability and performance of our new Student Information System (SIS), CalCentral, and associated third-party systems. This effort will leverage the delivered features in the new system and provide tools for continuous service improvements. (Lead: Student Information Systems)
	Student Advising Support: Enable academic and other campus advisors to support the success of all students more effectively by creating innovative programming to support advising across campus and the Advising Council and develop tools to support their work, including bringing together the necessary underlying data from bCourses and other student systems for new applications. (Lead: Research, Teaching and Learning)
	Digital Learning Initiative: Integrate Digital Pedagogy, Digital Content, and Digital Learning Analytics in support of innovation and access for teaching and learning by leveraging partnerships. (Lead: Research, Teaching and Learning; Library)
	Student Computing @ Cal: Transform the entire student computing experience at UC Berkeley while reducing redundancy and creating new services that can scale across campus. (Lead: Student Affairs IT; Library; and Research, Teaching and Learning)
Campus Strategy: Berkeley focuses on the good to address society's great challenges.	
G2 One IT Goal 2: Develop the research cyberinfrastructure Berkeley needs to address society's great challenges and to share knowledge for the public good.	
IT PRIORITIES	Secure Research Data and Computation: Support faculty, students and postdocs working with sensitive data by providing consulting expertise and coordinating efforts among the campus offices that are involved in reviewing data use agreements and security plans. (Lead: Research, Teaching and Learning; VCRO)
	Data Science Tools and Infrastructure: Partner with Data Sciences division to facilitate the broad adoption of innovative data analysis tools for students, making them readily available to any instructor by the end of spring 2020. (RTL)

Campus Strategy: Berkeley embraces the California spirit: diverse, inclusive, entrepreneurial.

G3

One IT Goal 3: Create a diverse and inclusive community of IT professionals who are trusted and strategic partners with the campus, alumni, and the public.

IT PRIORITIES

One IT Diversity and Inclusion: Foster a more diverse and inclusive culture across One IT by defining the program activities, identifying specific deliverables and allocating resources. (Lead: Office of the CIO)

IT Professional Development: Create a culture of growth and development for OneIT by implementing the IT Professional Development program. (Lead: Office of the CIO)

Campus IT Governance: Support the new campus IT Governance model by participating in the design, serving on committees as appropriate, and providing guidance and mentorship to staff hired to support the model. (Lead: Office of the CIO)

Berkeley's IT Foundation

G4

One IT Goal 4: Sustain the IT foundation for campus faculty, staff, students, and alumni. Improve campus IT systems and infrastructure through innovation, sustainable funding, campus governance, and organizational evolution. Support all One IT goals and campus strategies above.

IT PRIORITIES

Next Generation Wi-Fi: Improve the density and capacity of our Wi-Fi network and expand coverage for the campus over the next several years to improve performance, stability, and reliability; improve the campus user experience; increase the efficacy of our Wi-Fi network; and better support teaching and learning and research. (Lead: Infrastructure Services - Telecom)

Security IS-3: Setting the Foundation for Information Security Risk Management Project ISO, will roll out a comprehensive plan to enable units to comply with the newly updated IS-3, the systemwide information security policy that brings sweeping changes to the way information security risk is handled within the university. Units are now responsible (including financial responsibility) for managing their own risk. (ISO)

Launch Cloud Management and Container Platforms: Develop a cloud management platform (CMP) for both on premise self-service private cloud and integration with public cloud and a service to deploy Kubernetes clusters for campus that will support our campus cloud strategy and the Data Science Program. (DPS)

Open Access: Accelerate Library's ongoing effort to make the products of UC research and scholarship as freely and widely available as possible through open access. (UC Elsevier Negotiations, Libraries)

Campus Campaign Technologies: Select and begin initial implementation of improved reporting platform and ecosystem with improved functionality and end user responsiveness to meet the needs of the new Campaign. Platform should have long term durability to broadly meet UDAR's needs for next 5-7 years. (UDAR)

Enterprise Data Lake: Transition the AWS data lake (which currently only supports the Berkeley Online Advising tool) to an enterprise data lake managed by the Enterprise Data Warehouse and Data and Platform Services teams as an essential first step in making a next-generation data integration and analytics environment available to the broader campus. This is an essential component of UC Berkeley's cloud strategy. (IST Enterprise Data, IST Data & Platform Services)

Regional Service Model Tools: Work with the Regional Service units to provide Automation Tools, Service Portal, and ServiceNow enhancements in support of the new regional support model. (Enterprise Applications)

UCSF Strategic Partnership: Support the development of a stronger strategic relationship between UCB and UCSF by enhancing collaboration tools, reducing barriers for joint student and faculty activities, and allowing for seamless participation across both campuses. (UCB and UCSF CIOs)

Smart Campus: Explore the smart campus concept, identify opportunities here at Berkeley, and propose a roadmap for pursuing. (CTO)

The One IT community builds from the campus’s new “strategic planning foundational values and principles” as we implement our One IT Strategic Plan.

Strategic planning foundational values and principles

Berkeley’s strategic plan is founded on our core institutional values and commitments:

1 Diversity—
Broadly conceived and expressed in the composition of our faculty, students, and staff; and the breadth and inclusiveness of our academic programs, research enterprise, and public service.

2 Excellence—
An unwavering commitment to maintaining Berkeley’s role as a research university of the very highest quality in all of its endeavors.

3 Innovation—
In the spirit of California’s position on the nation’s geographic, social, and intellectual frontier, as well as Berkeley’s historic place at the forefront of scientific and academic research and social movements, a drive to constantly push the boundaries of knowledge in our research and scholarship, as well as in pedagogy, instructional technology, and operations.

4 Public Mission—
Consistent with our founding as California’s land grant university and with the state and federal support that has contributed to our success, a commitment to expanding opportunity; to egalitarian and democratic values; to research and scholarly work that serves our community, our state, our nation, and the world; and to the fostering in our students, faculty, and staff of a strong ethic of public service and social justice.

5 Accountability and Transparency—
Consistent with our public mission and our belief in the intrinsic value of knowledge and information, a commitment to transparency in our operations, sound stewardship of our resources, and honest and respectful dealings with all members of the campus community as well as the larger society we serve.

Twenty-three campus IT Units are helping to lead One IT work on campus. The following pages include the top 10 operational and project priorities for FY19 for each of these units.

23 IT Departments Across Campus Carrying out 200+ Tactics to Support UC Berkeley

1. Berkeley Law IT	13. IST: Student Affairs IT
2. Engineering IT	14. Letters and Science IT
3. Environmental Health and Safety IT	15. Libraries IT
4. Facilities Services and Capital Strategies IT	16. OCIO: Office of the Chief Information Officer
5. Haas Technology Solutions	17. OCIO: Information Security Office
6. Intercollegiate Athletics IT	18. OCIO: IT Client Services
7. IST: Architecture, Platforms and Integration	19. OCIO: Student Information Systems
8. IST: Data Platform Services	20. Research, Administration and Compliance IT
9. IST: Enterprise Applications	21. Research, Teaching and Learning
10. IST: Enterprise Data Warehouse	22. University Development and Alumni Relations IT
11. IST: Infrastructure Services	23. University Health Services IT
12. IST: Infrastructure Services - Telecom	

ReIT Strategic Plan Appendices: Top Tactics for 23 IT Departments FY20

(updated September 2019)

Berkeley Law IT		Top Tactics for FY20
1. Application Platform	Migrate to a new application development and delivery platform. Review and update internally-developed applications to run on the new platform. Segment applications across different service pools based on security level and target audience (public, private, library, QA, student).	
2. Online Courses	Expand online course offerings and uptake. Partner with campus Digital Learning Services to develop expanded course offerings for our Hybrid LLM and Executive Programs and give greater options to students enrolling in these programs.	
3. Tableau	Use analytics and data to support decision making. Continue the Law School Data Management Initiative in organizing data centrally across different law school groups. Leveraging internal and external data reporting (from Cal Answers) for gaining insights into multi-year trends. Displaying narratives in Tableau.	
4. Remote Work Policy	Develop a remote work policy to support alternative work arrangements.	
5. Docusign	Leverage the campus Docusign service in improving student and faculty experience. Pilot the onboarding of Docusign users in Law with the Admissions, Business Service and Advanced Degree Program groups. Develop training and documentation for ongoing support and onboarding new groups.	
6. SIS	Leverage Phase 2 Student Information System project in meeting law school business processes. Completion of a law degree audit within Campus Solutions.	
7. Microsoft Collaboration	Migrate clinical program collaboration platform. Move the in-house Berkeley Law clinics to a Microsoft collaboration platform for their communication and collaboration needs under the UC contract to support their specialized legal work.	
8. Berkeley Desktop	Migrate to the Berkeley Desktop. Standardize both Mac and PC deployments across the Law school.	
9. Media Studio	Build a studio in support of media and course creation. Work with Law Communications to build out a studio space that can be used to develop content to support the mission of the Law School. This includes self-service recording facilities, managed production capabilities, and interview/simulcast capacity to support faculty/media interviews.	
10. Classroom Technology	Develop a 3-5 year plan for the upgrade and refresh of Law building classroom technology. Build and vet a plan with Law school leadership.	
Engineering IT		Top Tactics for FY20
1. Support Department and College Business Functions	Create new applications as needed and continuously improve existing applications that support departmental and college business functions.	
2. Salesforce Toolkit	Create Salesforce Toolkit for Research Lab Management, modeled after Simons Institute.	
3. Diversity & Inclusion	Support an inclusive workplace culture that encourages growth while developing and retaining a diverse team.	
4. Instructional Services	Increase support for instructional services for large- scale, including JupyterHub, Autograding and remote access.	
5. Upgrade NetApp Servers	Provide improved performance with SSDs and cloud support though AWS.	
6. Classroom Technology	Upgrade technology in classrooms. Standardize computer lab imaging process.	
7. Simplify Infrastructure	Retire physical and virtual servers providing commodity services. Where appropriate, increase the number of virtual servers and containers supporting non-commodity IT services.	
8. Cloud Computing	Establish best practices for support of local and cloud resources for research projects. Orchestration through Kubernetes or Slurm.	
9. Wireless	Improve wireless through better AP placement and increased density. Reduce the number of personal hotspot wireless access points.	
10. Soda Hall CRAC Replacement	Replace computer room air conditioning (CRAC) units in Soda Hall.	
Environmental Health &		Top Tactics for FY20

Safety IT	
1. Cyber Security Project Prioritization	EH&S has conducted an internal analysis of our systems and practices with a view to compiling a complete understanding of our current state and vulnerabilities. This analysis is in the process of being carved into a list of projects for EH&S to undertake. Once we have this list, we will assimilate it into our master project priority list and prioritize it.
2. Integrate Core Applications with UCOP	EH&S will integrate core applications that support campus safety programs with Risk and Safety Solutions (UCOP). EH&S will continue to work closely with RSS in order to ensure that both groups are collaborating as effectively as possible. Both groups provide a variety of services to the same campus population. Sharing core data about research groups, campus locations, and departmental affiliations, helps us eliminate duplications in work effort and also maximize work efficiencies across the teams.
3. Google Cloud Platform	EH&S will convert all of our web-based applications to run on the Google Cloud Platform (Kubernetes). We currently own and maintain more than a dozen internally-developed applications, and they are all hosted on local servers. Converting to a cloud environment will help the department simplify our infrastructure, reduce costs and development time, and improve scalability.
4. Server Migration to IST	As part of our transition to a Cloud platform, we are also going to be retiring our physical servers. This will mean that we will be transitioning our non-Cloud servers to IST.
5. Web Application	EH&S will redesign and rebuild our existing web application for managing EH&S recharges (Services Recharge System). The primary focus is reduction of the administrative burden required to recover operational costs for safety services. The secondary focus is increasing transparency for end users about their billing for recharge.
6. Computer Upgrades/ Replacements	EH&S is in the process of complying with the Campus directive to retire all Windows 7 machines. Most of our computers can be upgraded to 10, but we have a significant number that need to be replaced at an estimated cost of \$15,000.
7. IS-3 Compliance	Build a database of all websites & applications used by EH&S staff in the performance of their work. As part of our IS-3 compliance, we are building a central resource for EH&S to know where we store our data and is it compliant for the PL level of the data being stored on it.
Facilities Services & Capital Strategies IT	Top Tactics for FY20
1. Maximo Upgrades	Upgrade Maximo application platform to current release (7.6.x) and underlying websphere platform.
2. Business Process Improvements	Define updates to existing Maximo configuration that will improve processes.
3. Maximo Integration with UCB APIs	Provisioning, deprovisioning, and updating individuals from UCPath using UC APIs.
4. Implement MaxAssist	Create guides for users to process tasks in Maximo.
5. Mapping and Drawing Document Management	Document Management System for Drawings/OMs/Archives. Develop long-term plan and identify tools/systems to manage building drawings, support drawing control, manage related building and project deliverables.
6. Update and Manage Campus Building Floor Plans	Develop processes for managing drawing updates, publishing, and sharing building floor plans with campus stakeholders.
7. Design GIS Schema	Design layers and schema for a comprehensive Geographic Information System using the local government information model.
8. Update Campus Base and Utility Maps	Create standard thematic maps to support campus planning, operations, and evaluations.
9. Firewall Consolidation	Simplify and consolidate multiple firewall instances. Reduce policies to reduce end user latency.
10. FSIT Infrastructure Review	Optimize, streamline, and simplify FS IT server and data infrastructure. Upgrade server infrastructure to Win 2016 platform, consolidate equipment in key locations and data center as appropriate. Document infrastructure for sustainability.
Haas Technology Solutions	Top Tactics for FY20
1. Restore Research Computing Core Services	Goal to restore research computing core services to n+1 generation hardware levels. Success of this project will mean there is no longer a need to spin up specific hardware clusters to address new

	faculty computing requests as they can be handled by our Haas our core, campus or cloud-based services.
2. Release New JupyterHub Cluster	Release new JupyterHub with no disruption to our existing clients and be able to support predicted increased demand in the service.
3. Microsoft Power BI Rollout	Offer staff and faculty the ability to build reports using Microsoft BI.
4. Rollout Core Hadoop Cluster	Offer faculty the ability to store their datasets in our Hadoop cluster.
5. Rollout Admissions FTMBA 3+2 Application	Provide applicants for the new 3+2 program the ability to apply online.
6. Wi-Fi/ Network Upgrade	Improved Wi-Fi and network performance for Haas students, faculty, and staff.
7. Slack Rollout	Slack Rollout to the FTMBA, EW MBA and staff at Haas. Goal to have all students and a good portion of the staff using Slack to facilitate collaboration across the school.
8. DAR Data Warehouse Upgrade	Success of this project means we are no longer having to modify the hard coded import scripts on an annual basis to reflect changes in business rules. All changes to import rules are being handled through simple configuration changes.
9. Consolidation of Event Mobile Apps	Consolidate all event mobile apps into a single Haas event mobile app. 1) Improve the experience of visitors attending our campus events. 2) Streamline the workflows of those responsible for putting on these events. 3) Raise the production values of our event apps. 4) Reduce operating costs associated with offering event apps.
10. Redesign Program Admissions Applications	Redesign program admissions applications to improve student experience. 1) Improve the experience of students applying to the school. 2) Raise the production values of our application experience.
Intercollegiate Athletics IT Top Tactics for FY20	
1. Onboard with ITCS	Aim to have ITCS handling at least 50% of our Tier 1 Helpdesk calls.
2. Complete Network Refresh	Backbone of network has been refreshed and we've got 5 years to decide if/how to get out of running our own network.
3. Video Analysis Tools	Support Athletics sports team's evolution of video analysis. Provide more teams with reliable video analysis tools while still allowing Athletics to control budget.
4. PCI Telephony Project	Goal for us (all of campus) to pass our annual PCI attestation despite the new requirements.
5. Migration of SQL/ACCESS apps	Success of this project will mean we've moved away from using Access as a front end to at least half of our internal applications.
6. Simplify Internal Staff Management Application	Simplify our internal staff management application. Goal to use APIs and existing primary data sources and do little to no replication within our internal tracking application.
7. Improve New Employee Onboarding	Aim to have campus new employee onboarding happens at a pace that functions for Athletics. The plan is to bring new employees into Athletics and within 48 hours of their start date they can do anything/everything they need on/with technology.
8. AT&T Firstnet Partnership	Evaluate more opportunities for using AT&T Firstnet partnership. Be more efficient, more effective, more secure, and safer while hosting big events.
9. Sharepoint Office365	Figure out if Sharepoint Office365 is or isn't part of our long-term plans. Success will mean we have a place of PL2 data that is flexible and reliable that integrates well with other campus solutions (Calgroups).
10. Migration to Campus Data Center	Move more assets into the campus data center. Goal is to have a nice set of hardware that lives in the data center on redundant power and cooling and it all just works and doesn't affect our budget too greatly.
IST: Architecture, Platforms and Integration (API) Top Tactics for FY20	
1. File Storage & Collaboration	Ensure researchers and administrative units have clear options for sharing and collaborating on their proprietary/sensitive content and/or data.
2. DocuSign	Evolve DocuSign campus offering to become a solid service. This will entail: continuing to expand user base, working with Advisory Board and leadership to establish long term funding and, as resources allow, implement high value use cases that leverage DocuSign integrations with other systems, e.g. Imagine, Salesforce, ServiceNow, SIS, etc.
3. Mobile Application Platform & Distribution Service	Improve the student experience by including features in the UC Berkeley Mobile app that make it easier for students to explore and navigate campus.

4. Amazon Web Services	Partner with Data & Platform Services to fully manage campus' presence in Amazon Web Services (AWS), Google Cloud Platform (GCP), and Azure/O365.
5. Web Publishing Campus Strategy	Ensure Open Berkeley offers a cost effective, appropriate web publishing service, with expanded use-cases better addressing campus (and especially academic) needs, that allows us to share our information with the world securely and accessible. Identify gaps in the overall campus web publishing strategy and begin to assess possible future needs to raise for consideration.
6. Atlassian Tools	Establish responsive and sustainable service and resource model for Atlassian tools (JIRA and Confluence) and Github, and stabilize the offering in line with their respective IST Application Recovery Priority levels (tier-0 for WikiHub and tier-1 for Jira/Github).
7. ITSM Practices	Mature IT Service Management Practices: Expand the use of metrics, KPIs and use of data for decision-making. In FY19 this began with Tiger Team engagement on incident management and Marlita's work on knowledge management. Knowledge Management Initiative: Continue to evolve Knowledge Management initiative to improve the quality of knowledge, processes to create and manage knowledge and to support campus use of knowledge materials.
8. Software Distribution	Re-evaluate model for software distribution to ensure we can accommodate more digitally delivered and activated services to help Berkeley manage vendor lock-in while fostering a climate of abundance.
9. Critical KTLOS	Engage in critical KTLOS (Keeping the lights on securely) and CI (Continuous improvement) work to ensure that: Enterprise Email Services, Productivity Suite services (Google G Suite, Office 365/MS Office, Adobe CC and Box), Imagine, Docusign, EIS/iHub, Project Tools (e.g. Github, JIRA, Confluence, etc), Web Platform Services (including Open Berkeley), Web Accessibility (including ongoing Siteimprove), and the System Status Page are well supported and continue to be available for all of campus. [While this is ranked 9/10 it is actually foundational to all other work in the department, and for all of IST's success in general. So - from a ReIT / new strategic priority perspective this is not the top priority, from a critical operations perspective it is #1]
10. Continuous Improvement	
IST: Data Platform Services (DPS) Top Tactics for FY20	
1. Cloud Management & Container Platform	Launch Cloud Management and Container Platforms: 1a. Develop a cloud management platform (CMP) for both on premise self-service private cloud and integration with public cloud solutions. 1b. Develop a service to deploy Kubernetes clusters for campus that will support our campus cloud strategy and the Data Science Program. Develop a new service to manage Kubernetes clusters for campus (administrative/enterprise and RTL).
2. Secure Research Data and Computation	Partner with RTL to develop the Secure Research Data Compute (SRDC) environment.
3. Cloud Strategy	Continue to refine the laaS portion of our future looking cloud strategy.
4. Installs, Upgrades, Migrations	KTLO: Perform needed software installs, upgrades and migrations.
IST: Enterprise Applications Top Tactics for FY20	
1. UCPath	UCPath implementation completion.
2. Automation Toolkit	Regional Service Support units' Automation Toolkit.
3. Secure Application Systems and Data	Secure Application Systems and Data ensuring systems are maintainable, sustainable, and reliable.
4. CalTime	Enhance CalTime to handle time collection for the 2,000 Readers and Tutors on campus.
5. BFS/BLU	BFS/BLU Server Migration from Windows to Linux.
6. Oracle Testing Framework	Oracle Testing Framework for BFS Project.
7. ServiceNow	Expand ServiceNow functionality.
8. Document/Record Management	Document/Record management and archival for BFS, HCM, PPS, and Travel records.
9. BFS	Peoplesoft Elasticsearch for BFS.

10. Rails & Coldfusion	Replatforming of Rails and Coldfusion Applications.
IST: Enterprise Data Warehouse (EDW) Top Tactics for FY20	
1. Cal Answers HR, Payroll & Budget	Create/retrofit Cal Answers HR, payroll, and budget dashboards in support of UCPath, integrating legacy and UCPath-sourced data.
2. Tableau	Further automate and improve the Cal Viz (Tableau) service to make campus data assets more broadly available as appropriate, and to attract more campus partners to participate in the consortium.
3. AWS Data Lake	Transition the AWS data lake (which currently only supports the Berkeley Online Advising tool) to an enterprise data lake managed by the Enterprise Data Warehouse and Data and Platform Services teams as a necessary first step in making a next-generation data integration and analytics environment available to the broader campus.
4. POCs: Snowflake & AWS Redshift	Complete POCs assessing benefits and challenges of moving to data warehouse cloud solutions: Snowflake and AWS Redshift.
5. Cal Answers Finance Dashboards	Expand Cal Answers finance dashboards to include Cal Planning budget data vs. BFS actuals.
6. Cal Answers Student Dashboards	Expand Cal Answers student dashboards to include more academic plan data as well as summer session snapshots.
7. Decommission Oracle BI Apps	Begin decommission of the desupported Oracle BI Apps Data Warehouse Administration Console (DAC), which currently schedules and manages the build of Procure to Pay data in the EDW, and port to methods and technologies consistent with all other EDW subject areas.
8. EDW Data Models	Document EDW data models using Erwin and make available to team and key partners for reference and common understanding.
9. Continuous Improvement	Continuously Improve (CI) EDW data quality and processes.
10. Operations	Keep the Lights on (KTLO) - EDW.
IST: Infrastructure Services Top Tactics for FY20	
1. Infrastructure Support for RTL & Admin	Provide infrastructure support to initiatives that provide new Research, Teaching, Learning, and Administrative capabilities.
2. Workplace Culture	Create an inclusive workplace culture that people want to be a part of, while developing and retaining a diverse employee team.
3. Automation & Monitoring	Implement automation and monitoring that enable sustainable operations.
4. System Changes	Implement system changes that provide improved systems security and resiliency.
5. Evolve Services	Evolve service offerings that meet campus demand while remaining competitive with externally available services.
6. Operational Stability	Maintain and upgrade systems software that ensure security, vendor support, and sustainable operations.
7. Data Center	Increase Data Center utilization and compute density to minimize extraneous use of campus space, energy/costs, and carbon footprint.
8. Continuous Improvement	Evolve ITSM processes in ways that maximize value to the campus.
9. Communications & Outreach	Improve communications and outreach to service stakeholders.
10. IT Partnerships	Grow IT partnerships between teams and organizations through formally documented agreements (SLA's, OLA's and MOU's) to increase trust between departments and organizations, and to minimize unnecessary duplication of services / team functions.
IST: Infrastructure Services - Telecom Top Tactics for FY20	

1. Next Gen Wi-Fi	Improve the campus user experience with better wireless network performance and reliability (campus IT infrastructure).
2. IP Flex / SIP	Improve voice network resiliency and cost efficiency (campus IT infrastructure).
3. Voicemail RFP	Complete the Voicemail Upgrade RFP to decide future path, since the current hardware is going EOL (campus IT infrastructure).
4. Core Network upgrade	Complete the campus Core Network upgrade (campus IT infrastructure).
5. Workplace Culture	Create an inclusive workplace culture that people want to be a part of, while developing and retaining a diverse employee team.
6. HIPAA for Zoom	Provide compliance with Healthcare Industry privacy (HIPAA) requirements on Zoom video conferencing (security & privacy compliance).
7. PCI/DSS Compliance	Make credit card purchases over campus voice telephones compliant with new PCI Industry guidelines (security & privacy compliance).
8. Process Evolution	Continuous service improvement, including service delivery processes, monitoring and automation.
9. Enhanced Billing Reporting	Provide enhanced reporting for customer on-demand self-service analysis, and scale up Cal Answers Training for recharge customers (Customer education and self-service).
10. Device Encryption	Device Encryption: Implement Cellular Encryption guidelines in response to new IS-3 policy requirements (security & privacy compliance).
IST: Student Affairs IT (SAIT) Top Tactics for FY20	
1. Upgrade Workstations	Upgrade and refresh Student Affairs Division workstations.
2. Upgrade Windows 2008 Servers	Upgrade Student Affairs Windows 2008 servers.
3. Revise Meal Plan Options	Revise meal plan options for the 2019-20 academic year and beyond.
4. Wi-Fi Upgrades	Upgrade Wi-Fi in Residence Halls (year 1 of 2).
5. Student Computing @ Cal	Continue to Lead Student Computing @ Cal Project to improve student computing experience.
6. Student Employment & Leadership Program	Expand reach of Student IT Employment & Leadership Program.
7. Workforce Development & Culture	Enhance SAIT workforce development and workplace culture and climate.
8. Cal1Card Technology Replacement	Enable Cal1Card technology replacement (year 2 of 5).
9. IT Security Risk Profile	Develop Student Affairs IT Security Risk Profile.
10. Mobile Device Management	Implement solution for mobile device management in Student Affairs.
Letters and Sciences IT Top Tactics for FY20	
1. File Share Migrations	File share migrations for departments in the College from LSIT NetApp to ITCS managed shares.
2. Continued MOU	Continued MOU between LS Dean's Office and Psychology for dedicated local IT support for work that falls outside the scope of services for ITCS and continued assistance with security risk mitigation, equipment standardization, and security consultation for Psychology clinics.
3. Website Support	Custom website support for departments migrating to Open Berkeley or ongoing non-Open Berkeley sites. Including interfacing with Office of the Registrar for academic guide data and 508 compliance.
4. NetReg Clean-up	NetReg clean-up for LS subnets.
5. Filemaker Server Abatement	Filemaker server abatement.

6. Print Server Abatement	Print server abatement.
7. SQL Server Abatement	SQL server abatement.
8. Active Directory Clean-up & Migration	Active Directory clean-up and migration from LSIT managed OUs to ITCS managed OUs for College.
9. Pilot Laptop Loaner Project	Pilot laptop loaner project for English department lecturers.
10. IT Staff Collaboration	Help foster a community for departmental IT staff who do not report to LS IT that can help leverage the College's diverse IT knowledge and encourage community and inter-departmental support for IT needs not covered by existing service providers.
Libraries IT Top Tactics for FY20	
1. UC Elsevier Negotiations	Accelerate Library's ongoing effort to make the products of UC research and scholarship as freely and widely available as possible through open access (UC Elsevier Negotiations).
2. Digital Lifecycle Program	Enhance, evolve, and expand Library's digital lifecycle and initiatives program in support of innovation and access for research, learning, teaching, and social and public good.
3. Support Research Data	Provide support for research data in support of research, learning, and teaching.
4. Discovery Applications	Continue to enhance, maintain, upgrade and support Library resources discovery applications - Millennium, WorldCat, and participate in UC Systemwide conversations and workflows related to Systemwide Integrated Library System (SILS) selection and migration.
5. Enterprise Server Infrastructure	Continue to explore, use, and leverage campus enterprise server infrastructure (VM or AWS) and an operations solutions (Kubernetes, Framework etc.) to maintain an agile and robust library technologies infrastructure.
6. Application Documentation & Automation	Implement application documentation and automation to enable sustainable library applications and solutions.
7. Technology Support	Maintain and improve public, student, and staff computing and technology support in the Library's computer labs used in conjunction with ServiceNow ticketing system.
8. Library Website	Continue to enhance and develop library website to meet evolving UX needs for enhanced library services and resource discovery.
9. Diversity & Inclusion	Continue to create an inclusive, diverse, and supportive Library environment that aids in Library IT position recruitment, training, and retention.
10. Center for Connected Learning	Technology visioning/support for Center for Connected Learning.
Office of the CIO (OCIO) Top Tactics for FY20	
1. Equity and Inclusion	Support the IST culture change initiative in conjunction with the Civility Partners consultant.
2. Diversity & Inclusion	Foster a more diverse and inclusive culture across One IT by identifying resources, defining the program activities and specific deliverables.
3. Move to Telegraph	Move of IST to 2850 Telegraph, which will consolidate most IST staff into one location.
4. Alignment of ReIT Strategic Plan with Campus	Align One IT Plans and Strategies to Support the Campus Strategic Framework.
5. IT Professional Development	Create a culture of growth and development for One IT by implementing the IT Professional Development program.
6. IT Governance	Support the new campus IT Governance model by participating in the design, serving on committees as appropriate, and providing guidance and mentorship to staff hired to support the model.
7. IT Service Management	Continue to mature IT service delivery practices through implementation of the IT Service Management (ITSM) program.
8. UCSF Collaboration	Work with UCSF to improve the ability for UCB and UCSF students and faculty to work more closely together on courses, research, and other academic programs.

9. Smart Campus Proposal	Develop a Smart Campus proposal over the next year to put forward for the FY21 budget that advances a vision to leverage technology that improves the campus experience by offering new services and creating safer, more efficient spaces.
10. Remote Work & Telecommuting Policy	Develop remote work and telecommuting standards and policies for OCIO/IST and to provide resources for other campus IT units looking to formalize standards.
OCIO: Information Security Office	Top Tactics for FY20
1. IS-3	Setting the Foundation for Information Security Risk Management Project. ISO will roll out a comprehensive plan to enable units to comply with IS-3, the systemwide information security policy that brings sweeping changes to the way information security risk is handled within the university. Units are now responsible for managing their own risk.
2. Security Workforce Strategy	ISO will address the challenges of competing for talent in the hottest job market in the country.
3. Central Authorization Project	ISO will expand the use of centralized authorization services alongside robust authentication services.
4. Information Security Policy Reboot	ISO will revise and modernize several major security policies to align with system wide changes and new operational realities.
5. NetReg Upgrade	ISO will introduce new functionality to the NetReg asset registration database tool.
6. Preventative Controls - Next Phase	ISO will add additional preventative controls to the network, building on the bSecure firewall work.
7. Security Community of Practice Group	ISO will spin up a standing meeting to share information security conversations with the community.
8. Security Awareness Toolkit	ISO will begin distributing information security education toolkits quarterly to help units build awareness among their staff and faculty.
9. Network Vulnerability Scanning	Migrate network vulnerability scanning to a supported platform. ISO will deploy the Tenable vulnerability scanning solution that was recently purchased.
10. Security Metrics Visibility Project	ISO will build dashboards to display relevant security metrics for various populations.
OCIO: IT Client Services (ITCS)	Top Tactics for FY20
1. Upgrade Win 7 Machines	Upgrade ITCS supported institutionally-owned computers running Windows 7 to Windows 10.
2. MOUs with departments	ITCS will form and maintain agreements with departments to help support their specialized IT needs.
3. Hire ITCS Career Staff & Students	ITCS will hire additional career staff (FTEs and backfills) to provide timely Service Desk and Desktop Support services to campus; and a student workforce (~9 work-study) to upgrade computers from Win 7 to Win 10 and to deploy upgraded computers.
4. IT Desktop Support Service Management	ITCS will find ways to automate Desktop Support Service fulfillment so that customers wait time and technician work time is reduced.
5. IT Desktop Support Incident Management	ITCS will improve Incident Management process for Desktop Support by reducing wait time for help and shifting resolution to Tier 1 (Service Desk).
6. Printing Service Improvement	ITCS will make automated printer installations available to campus population with a Calnet ID.
7. Server 2008 Abatement	ITCS will migrate departmental data off of all Server 2008 file servers with managed data so that servers can be turned off by Server 2008 EOL date in January 2020.
8. Knowledge Management Improvement	ITCS will work with the Knowledge Management Community of Practice to improve the effectiveness of customer-facing knowledge for IT Services.
9. Add Chat Channel to Service Desk	ITCS will add an additional contact method to Service Desk.
10. Hardware Standards and Recommendations	Create client-focused web presence for exploring and selecting hardware supported by IT Client Services that meets the needs of faculty and staff.

OCIO: Student Information Systems (SIS)		Top Tactics for FY20
1. SIS Phase 2	Meet and/or exceed SIS Phase 2 project deliverable timelines and budget expectations.	
2. Technology Platforms	Improve the effectiveness, stability, and performance of Campus Solutions, CalCentral, and third party systems by fully leveraging the delivered features and new tools for continuous service improvements.	
3. Governance	Define and implement organizational roles, responsibilities, and processes required of SIS and Campus Partners to effectively operate and deliver service improvements that meet the business needs of the campus.	
4. Workforce Strategy & Culture	Invest in staff development, culture, and workforce strategy to ensure teams are appropriately prepared to succeed in their technical and operational assignments.	
5. Internal SIS Processes	Internal SIS process improvements.	
6. Communications	Improve communications processes and content to more effectively convey the value and impact of SIS' efforts to users and campus stakeholders.	
Research, Administration and Compliance IT (RAC)		Top Tactics for FY20
1. Reusable Forms & Workflow	Implement a reusable forms and workflow platform supporting Sponsored Projects Office and related business processes. Subaward requests on contract and grant funds will be the first form deployed for the Sponsored Projects Office in FY20. Appointment Funding Approval will be in production pilot for Berkeley Regional Services BEST Region in July 2020. SPO has identified another ~25 form-based processes for prioritization for development in FY 20 and beyond. Form and workflow components of the application have been published to GitHub in an inner source model to allow for collaboration and reuse. Updates will be published as they are developed.	
2. RAC Data Mart	Build out the RAC Data Mart to centralize query logic across RAC's various data feeds, dashboards, permission repositories, canned reports, and custom reports to drive data quality through reuse; increase velocity in developing applications; decrease product lock-in by moving logic into middleware; rationalizing and simplifying the data model in order to enable more reporting through visual query builder tools; enable more developers to build reports by themselves.	
Research, Teaching and Learning (RTL)		Top Tactics for FY20
1. Secure Research Data and Computation	Improve services for researchers working with restricted data: launch new and improve existing systems; improve consulting expertise; and develop policy and processes.	
2. New Advising Tools for the Student Experience	Enable academic and other campus advisors to support the success of all students more effectively by continuing to create innovative programming to support advising across campus and the Advising Council and develop tools to support their work, including bringing together the necessary underlying data from bCourses and other student systems for new applications.	
3. Digital Learning Initiative	Integrate Digital Pedagogy, Digital Content, and Digital Learning Analytics in support of innovation and access for teaching and learning by leveraging partnerships through the Digital Learning Initiative.	
4. Support for the Data Science Initiative	Partner with Data Sciences division to facilitate the broad adoption of innovative data analysis tools for students, making them readily available to any instructor by the end of spring 2020.	
5. Course Capture	Enhance student learning and study support through the roll out of the Course Capture Replacement/Enhancement and Media Asset Management project funded through the Student Tech Fund.	
6. GA HD Upgrade Project	Support lecture courses with improved display capabilities through GA HD Upgrade Project.	
7. Accessibility	Help campus continue to ensure the creation and distribution of more accessible course content through increased adoption of accessibility tools, best practices, strategies and standards.	
8. RTL Alignment	Continue to align RTL by guiding and supporting staff in adapting to organizational changes that result in more mission-aligned effective services for faculty and students.	
9. RTL Financial Operations	Continue to develop our RTL financial operations to ensure they are transparent, accountable, and efficient.	

10. AWS Data Lake	Transition the AWS data lake (which currently only supports the Berkeley Online Advising tool) to an enterprise data lake managed by the Enterprise Data Warehouse and Data and Platform Services teams as a necessary first step in making a next-generation data integration and analytics environment available to the broader campus. This is an essential component of UC Berkeley's cloud strategy.
University Development and Alumni Relations IT	Top Tactics for FY20
1. Technologies for the New Campus Campaign	Select and begin initial implementation of improved reporting platform and ecosystem with improved functionality and end user responsiveness to meet the needs of the Campaign. Platform should have long term durability to broadly meet UDAR's needs for the next 5-7 years.
2. Fundraiser Dashboards	Implement initial set of half dozen dashboards to answer core management needs for fundraisers and fundraising managers, enabling successful coordination of Campaign efforts across campus
3. Pitney Bowes Spectrum	Continue implementation project for Pitney Bowes Spectrum data integration platform; finalize work for identified core cases (email, phone, address, events, pledges, gifts).
4. UDAR CTO Retreat	Convene retreat for UDAR CTO's team of direct reports to plan and initiate metrics based management to align units with highest priorities and demonstrate progress over time.
5. Helpdesk Platform	Finalize adoption of new Helpdesk platform and related user intake and knowledge base; convert legacy data into new platform.
University Health Services IT (UHS)	Top Tactics for FY20
1. UHS-IT Staffing & Org	UHS-IT Staffing changes and organizational adjustments.
2. SHIP Transition	SHIP Transition to new insurance carrier.
3. Innovation Workgroup	Innovation Workgroup and IT Governance.
4. PnC Web Infrastructure	PnC Web App infrastructure and iOS support.
5. Video-based Appointments	Video-based appointments for mental health and medical.
6. Radiology Interfaces	Radiology system replacement (PACS) and new system interfaces.
7. Sports Medicine Support	Sports Medicine support (new clinical assessment tools).
8. Secure Cloud Hosting	Secure (HIPAA approved) cloud hosting for our Electronic Health Record systems.
9. Data Analysis & Reporting	Support for health data research.
10. HIPPA Risk Analysis	Annual risk assessment and report to campus leadership.