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 technology infrastructure needed 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.**
IT Priorities for FY 22: • Digital Learning Strategy • Student Tech Equity	***IT Priorities for FY 22:*** • Research Cybersecurity • UC Library Search	***IT Priorities for FY 22:*** • Strategically Aligned IT Organization • Accessible Digital Tools and Content • Campus IT Governance • Enable One IT Professionals

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.

IT Priorities for FY 22:

- Campus-wide Cybersecurity Implementation
- Improving the Campus Wi-Fi Experience
- Data Center / Cloud Services Strategy and Roadmap
- Enabling a Successful Return to Campus
- Google / Box File Storage and Migration

One IT Strategic Goal 1

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

Digital Learning Strategy

Advise and support the development of a campus-wide strategy for digital learning to ensure that we continue to build instructional resilience, continue to advance the Digital Learning Initiative, and have a more clearly defined approach to online education that addresses accessibility, risk, revenue and mission.

Lead: Research, Teaching and Learning

Key Measures of Success

- Cohort 2 of Semester in the Cloud has been implemented.
- Additional tools, best practices, support staffing, and technical/organizational infrastructure needed to improve instruction are identified and prioritized, and collaborations with campus partners to improve access for students with disabilities are continued.
- Continued assessment of faculty and student needs to inform best practices.
- Continued development of online and hybrid modalities, reinventing on-campus support services when necessary.
- Provided campus leadership with pedagogical and technical context accounting for the needs of students and instructors.
- Provided campus faculty and graduate students pedagogical and technical training and materials on subjects related to instructional resilience.
- Continued partnerships with Colleges, Schools, and Summer Sessions to develop campus-wide online courses and programs for mission driven and revenue generation opportunities.

Student Tech Equity

Support and advocate for equitable technology access to enable undergraduate and graduate students to fully engage in learning and research. Continue to provide technology such as laptops, Wi-Fi hotspots, and other peripherals to students with significant financial need via the Student Technology Equity Program (STEP).

Lead: Student Affairs IT

Key Measures of Success

- Worked with campus partners (e.g., Student Technology Services, Cal Nerds, STEM Equity and Success, Student Technology Council) to identify and address core student technology equity issues.
- Developed proposal for a revamped Student Technology Equity Program, supported by philanthropy and other sources, to address digital experience needs FY23 and beyond.
- Returned devices (e.g., laptops, tablets) are redeployed to additional students in need.
- New technology is provided to students in need as long as inventory remains.

One IT Strategic Goal 2

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

Research Cybersecurity

Incentivize and facilitate researchers to adopt fully the best practices of secure computing and data management, making available secure solutions coupled with supporting educational, consulting and outreach services for onsite and cloud-based computing. Conduct this effort in coordination with partners on campus—Research, Teaching, and Learning Services (RTL); Information Security Office (ISO); Vice Chancellor for Research Office (VCRO); Information Services & Technology (IS&T); the D-Lab; and Library—as well as Lawrence Berkeley National Lab.

Lead: Research, Teaching, and Learning

Key Measures of Success

- The Secure Research Data and Computation (SRDC) platform is available to researchers working with highly sensitive data, providing secure virtual machines (VM), high-performance computing (HPC), and data storage, in addition to Savio and Analytics Environments on Demand (AEoD) for less sensitive data.
- The Research IT consulting and outreach team, collaborating with the VCRO and ISO, has identified researchers whose work could migrate to or be initiated in managed, secure facilities such as SRDC, Savio, and AEoD.
- Research IT domain consultants have been trained in cybersecurity requirements, strategies, and best practices in order to support research faculty, students, and staff. The Research Data Management team, in collaboration with the Library, D-Lab and ISO, is educating researchers on best practices for securely managing data throughout the entire data lifecycle.
- In collaboration with IS&T, we have identified and provided solutions to ensure the integrity and durability of research data.

UC Library Search

Participate locally and systemwide in implementing a shared, innovative system wide integrated library system (SILS) across all 10 UC campuses, two regional library facilities, and the California Digital Library. Coordinate and enable an enhanced and user-centered level of integration in core functional areas: circulation, management, and sharing of print, media, and electronic collections to help transform library services and operations.

Lead: Library

Key Measures of Success

- One centralized, enhanced discovery platform (UC Library Search) has replaced Melvyl as the UC-wide library catalog search tool.
- UC faculty, researchers, staff, and students are able to find and access full text of millions of print and online books, journal articles, and other content across all UC campus libraries.
- Library analytics for national and UC assessment have been centralized.

One IT Strategic Goal 3

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

Strategically Aligned IT Organization

Build an agile central IT organization that serves as a strategic partner to efficiently deliver campus IT services. Focus on the people, process, and structure to be agile, and to allow staff to do their best work. Embrace diversity and equity, and foster a sense of belonging on the team and with the campus community.
Lead: Office of the Chief Information Officer

Key Measures of Success

- Central IT is able to demonstrate to campus leaders that it is a trusted partner in delivering great strategic and operational value to the campus community and in service of the University's mission.
- Improved coordination between central IT and local IT units so that fewer services are duplicated and each department can focus on their unique strength and value.
- Central IT is able to more easily reallocate funds internally to manage decreasing campus funding while supporting strategic investment areas.
- Central IT is organized in such a way that its structure, processes, and staff are flexible and over time, respond effectively to rapidly changing needs in the external environment.
- Diversity, equity, inclusion, and belonging are integrated into the organizational structure and our work.
- Staff have opportunities for professional growth and experimentation.

Accessibility of Digital Tools and Content

In partnership with campus stakeholders, continue to support implementation of the UC IT Accessibility Policy and further evolve the institution's posture in relation to accessibility of all online applications, digital tools, and content.
Lead: Productivity & Collaboration Services

Key Measures of Success

- Widespread adoption of Siteimprove to assess website accessibility.
- Advocacy for increased accessibility of existing tools in use on campus
- Increased campus awareness of accessible tools and requirements during procurement.
- Increased adoption of accessible tools.
- Increased creation of accessible content.

Campus IT Governance

Establish a new mechanism/model to engage key campus stakeholders in governance around critical technology-related issues, including the Productivity Suite set of applications and tools; enterprise applications; data ownership and handling; and risk mitigation associated with the widespread use of unlicensed administrative cloud-based applications and tools. ***Lead: Office of the Chief Information Officer***

Key Measures of Success

- Stand up the new IT Strategy Committee.
- Stand up the new Productivity & Collaboration Tools governance group.
- Stand up the new Enterprise applications governance group, with an initial focus on Student Information Systems (SIS) and Berkeley Financial Systems (BFS).
- IT Governance has helped inform critical decisions regarding the Productivity Suite storage services.
- Campus leadership is better informed about strategic and critical IT issues, thus able to make more informed financial decisions regarding the funding of IT.

Enable One IT Professionals

Provide resources and support for the broader One IT community. Foster opportunities for connection, idea exchange, and professional development. ***Lead: Office of the Chief Information Officer***

Key Measures of Success

- Increased engagement of IT professionals outside the large central IT departments.
- Hosting of community-building, technical assistance, and training events, including discussion and support around the future of work.
- Needs assessment and outreach to full One IT community (all 850+ IT professionals).
- Discuss and define roles with existing One IT committee.
- Hiring of campus IT Professional Development lead in the Office of the Chief Information Officer.

One IT Strategic Goal 4

Sustain the IT foundation for campus faculty, staff, students, and alumni.

Campus-Wide Cybersecurity Implementation

Continue the multi-year phased implementation of IS-3 (UC's information security risk management policy) across campus, with a focus on high-risk academic, research, and administrative units, and ongoing engagement. ***Lead: Information Security Office***

Key Measures of Success

- Vice Chancellor for Research Office / Research IT / Information Security Office Research Security Partnership formalized; pilot research groups onboarded.
- 30% of campus academic and administrative units have completed all initial implementation tasks.
- Prioritization strategy for engaging with units formalized; Annual review for pilot units initiated.
- Processes for unit onboarding and status tracking have been operationalized.
- Program for ongoing engagement of security leads is in place.
- Campus Information Security Roles and Responsibilities Policy submitted to Compliance and Enterprise Risk Committee (CERC) for approval.

Improving the Campus Wi-Fi Experience

Without a sustainable Wi-Fi funding model, redirect limited efforts to implement changes to campus building and outdoor Wi-Fi that optimize design and available bandwidth, improve reliability and performance, and create a better overall user experience. Continue to support locally funded efforts to prioritize the upgrade of equipment in areas that provide incremental funding. ***Lead: Infrastructure Services and Telecommunications***

Key Measures of Success

- Campus outdoor Wi-Fi funding request approval received by the end of May 2021, to enable 50% completion of outdoor Wi-Fi implementation by the beginning of Fall 2021 semester.
- Campus building funding request approval received by the beginning of July 2021, for implementation of building improvements during FY22.
- Complete replacement and retirement of remaining legacy (Cisco) infrastructure, which is outdated and failing.
- Create a sustainable Wi-Fi funding model as part of the larger campus network funding proposal.

Data Center & Cloud Services Strategy and Roadmap

Develop a multi-year strategy and plan to address Berkeley's immediate and future computing and data storage needs through a combination of public cloud and on-premise capabilities. Create a roadmap for the data center services that the campus needs; plan the multi-year retirement of the Earl Warren Data Center; engage stakeholders representing research, academics, administration and IT; and continue developing/maturing our cloud services and infrastructure in a hybrid model. ***Lead: Chief Technology Officer***

Key Measures of Success

- A second supplier of data center services has been brought online to supplement the Earl Warren Data Center (and possibly to become one of its replacements).
- The number of co-located (“colo”) data tenants in Warren Hall has been reduced by 20%, with most moving to a new Information Services and Technology (IST) colo-providing location or cloud provider.
- Uptake of IST's private cloud expanded by 20%, along with a comparable reduction in physical hardware in the data center.
- With engagement of Berkeley's Cloud Community of Practice, the Cloud Resource Center is re-launched as a robust online resource for people choosing among on-premise (“on-prem”) and cloud-based options.
- Completed recommendations to campus for a financial model for computing and storage infrastructure (cloud and on-prem) for consideration by leadership.

Enabling a Successful Return to Campus

Continue to support the campus in using technology to aid in COVID recovery and transitioning to the physical campus. Provide leadership and guidance around best uses of technology for remote/hybrid operations as well as ensuring health and safety. Convene workgroups as needed to produce the best recommendations, solutions, and

tools to meet campus needs. ***Lead: Enterprise Applications***

Key Measures of Success

- COVID Recovery Compliance Tools that are easy to use and available for campus to track and verify compliance with campus policies for return to work.
- Campus dashboards that share critical data in understandable formats available to the campus community.
- Communication and data sharing that allows students, staff, faculty, and visitors to know what to do to support a safe campus environment.
- Guidance for campus around remote work and meetings to allow those who are not together in person to continue to serve the needs of campus and build community.

Google/Box File Storage and Migration

Recognizing the end to "free and unlimited" cloud storage and services, rationalize and stabilize file storage and collaboration options available. Develop and implement a plan to migrate files across different services to avoid costs related to service modifications from storage providers. ***Lead: Productivity and Collaboration Services***

Key Measures of Success

- A comprehensible and sustainable strategy has been developed for archives, backups, departmental/individual file storage, file share, and collaboration.
- New services or realigned existing services have been developed to better fit campus needs.
- The migration of large data to other service options has been started.
- Yearly migration targets for Box storage are met: 2,200 terabytes by 2022.
- Yearly migration targets for Google are met (Google is defining those targets as of this writing).
- Data management costs/effort for departments have been optimized.

These twenty-two campus IT units have shared their top department priorities and are helping to lead One IT work on campus. See their priorities beginning on p. 8 of our plan.

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